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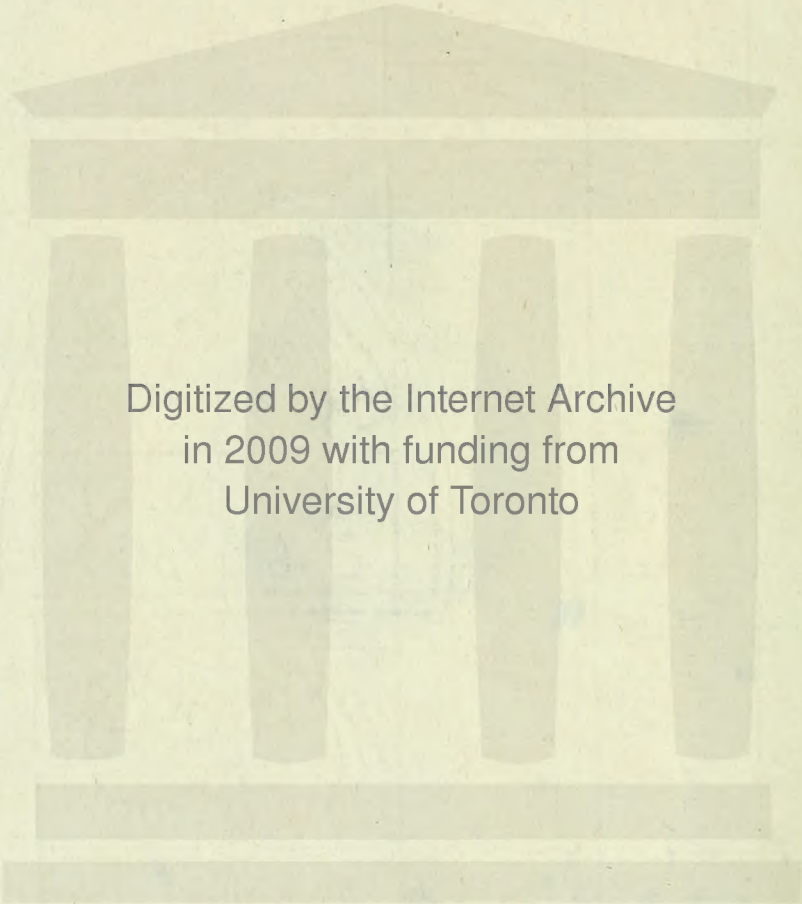
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MO NITI MELIO RA
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Hon.mus Francisc.us Bacon.us Baro de Veru-
lam. Vice-Comes S.cti Albani. Mortuus 9o Aprilis,
Anno Dñi. 1626. Annoq; Aetat 66.

OF THE

ADVANCEMENT

AND

PROFICIENCIE

OF

Learning:

OR THE

PARTITIONS

OF

SCIENCES

Nine Books.

Written in Latin by the moſt Eminent, Illuſtrious and Famous Lord

FRANCIS BACON

Baron of *Verulam*, Viſcount St. *Alban*, Counſellour of Eſtate and Lord Chancellor of *England*.

Interpreted by *Gilbert Wats*.

LONDON,

Printed for *Thomas Williams* at the *Golden Ball* in *Oſier*-Lane, 1674.

SACRATISSIMO DOMINO NOSTRO

CAROLO

DEI GRATIA, MAG. BRITANIÆ,
FRANCIÆ ET HIBERNIÆ REGI:
TERRÆ MARISQ. POTENTISSIMO
PRINCIPI: OCEANI BRITANNICI
AD QUATUOR MUNDI PLAGAS
DISPARTITI IMPERATORI: DOMINO
VIRGINIÆ ET VASTORUM
TERRITORIORUM ADJACENTIUM
ET DISPERSARUM INSULARUM
IN OCEANO OCCIDENTALI.

CHRISTIANÆ FIDEI DEFENSORI,
PACIS INSTAURATORI, PUB.
SECURITATIS AUCTORI
PIO FEL. AUG.

NEC-NON

SUB SUI NUMINIS
INFLUENTIA AC CLIENTELA
DUOBUS MAX. MUNDI LUMINARIBUS
PERPETUIS SAPIENTIÆ FLAMMIS
CERTISS. SCIENTIARUM CYNOSURIS
UTRISQ. ANGLIÆ ACADEMIIS

INFIMUS HUMILLIMUS

VERULAMII INTERPRES
HANC PRIMAM INSTAURATIONIS
MAGNÆ PARTEM

D. N. C. Q.

TO THE

PRINCE

OF

GREAT BRITAIN,

FRANCE and *IRELAND*;

THE

GROWING GLORY

OF A

FUTURE AGE.

THE ſacrifice of my Devotions in the Dedication of theſe Labours (*excellent Prince*) had gone a more humble way of Ambition, than through the hands of Kings and Princes, could I afterwards have juſtified ſuch humiliations. But the Tenure of this work is a Title-Royal, which no lapſe of time, nor alteration of language can reverſe. In the Original entitled to a King; ſo continued in the Tranſlation, and ſo in a direct line deſcends upon *Your Highneſs*, as a part of a Royal Patrimony, which I durſt not alienate by a lower inſcription. The Author is Sir *Francis Bacon*, a name well known in the European World; a learned man, happily the

ear-

learned'ſt, that ever lived, ſince the decay of the Grecian and Roman Empires; when Learning was at a high pitch; and which riſe and fell with thoſe Monarchies; for Scepters and Sciences have the ſame revolutions, the ſame period. In the vaſt ſpaces of time between thoſe and theſe laſt Ages, Philoſophy hath been, as it were in a ſlumber; for many centuries of years. For after the Chriſtian Faith grew up, the moſt Writers betook themſelves to Theology, and ſome miſtaking the right limits of Faith and Reaſon, fell foul upon *Ariſtotle*, and other Philoſophers, as Patriarchs of Hereſie, which were the Patrons of Reaſon. Somewhat awaked from this ſlumber ſhe was, by the *Arabian* Writers, the School-Doctors, and Spaniſh interpreters; made more active by the Chymick Philoſophers, but never perfectly recovered until the days of this Author, who is the firſt that ever joyn'd Rational and Experimental Philoſophy in a regular correſpondence; which before was either a ſubtilty of words, or a confuſion of matter. He, after he had ſurveyed all the Records of Antiquity, after the volumes of men, betook himſelf to the ſtudy of the volume of the world; and having conquer'd whatever books poſſeſt (his ſpacious ſpirit not thus bounded) ſet upon the Kingdom of Nature, and carried that victory very far, and which was more than thoſe victories, himſelf being mortal, left ſuch laws behind him, as may ſuffice to ſubdue the reſt, if Princes encourage men, and men be not wanting to themſelves. This attempt of his was favour'd by the Stars of his Nativity. For it was his felicity to live in the times of two *Great Patrons of Learning*, *King* JAMES, *Your Highneſs*

neſs Grand-father of bleſſed memory, and Your Royal Father now Reigning; and it was their glory that he lived in their times; and will be the eternal honour of this Nation, that the *Greateſt Kings* and the *Greateſt Philoſopher* met together in one age, in one Iſland. By the favour of *his Prince*, who well knew the value of Learning and Learned men, he was raiſed to the higheſt dignities in the Civil ſtate; and by his own happy Genius, to the higheſt degree in the ſtate of Learning; which was the greateſt wonder of the two; being ſuch incompatible perfections, and divided, enough to fill up the Sphere of the greateſt ablities alive. Yet with great applauſe he acted both theſe high parts, of the greateſt Scholar, and the greateſt States-man of his time: and ſo quit himſelf in both, as one and the ſame Perſon, in title and merit; became Lord Keeper of the Great Seal of *England*, and of the Great Seal of Nature both at once, which is a Myſtery beyond the comprehenſion of his own times, and a Miracle requires a great meaſure of Faith in Poſterity, to believe it. This is the Author I here preſent unto *Your Highneſs*, this his work, which by the powerful influence of Your favour ſhall proſper, and, it may be, be quickned to the regeneration of another *Phœnix* out of his Aſhes, to adorn your World: for it is only the benign aſpect, and irradiation of *Princes*, that inſpires the Glob of Learning, and makes Arts and Sciences, grow up and flouriſh. Heaven bleſs *Your Highneſs* with bleſſings on the right hand, and on the left, and make You Heir of all the vertues of your Royal Progenitors, that the Honour of Princes

begun

begun in them, may be continued in Your perſon; and that a future age may be ſo bleſſed in You, as the preſent is in Your Royal Father, *the Glory of Kings and their Admiration.*

YOUR HIGHNESS

Moſt humbly devoted

GILBERT WATS.

FA-

FAVOURABLE
READER.

THE *intended* Apologetick, *for the* Inſtauration of Sciences, *and the juſtification of* this Author, *which ſhould have been prefix'd this work, as a preparation thereto; is not publiſht. Motives to this reſolution, were divers, whereof ſome are very concerning.* Apologeticks *for ſuch Authors and ſuch enterpriſes are entertained with jealouſies, as if they threatned an innovation in the ſtate of Learning; by reverſing the judgements of* Antiquity, *and the Placits of the* Modern; *and by bringing in a new* Primum Mobile, *into the Intellectual Globe of Sciences, to the ſubverſion of the Arts received. But theſe are groundleſs fears, fancied by ſuch, who either underſtand not the intention of this attempt;* or, *engag'd in a* Profeſſory way, *ſuſpect their profit and reputation to be in danger, if ſuch deſigns ſhould take effect. Our Author proteſts againſt ſuch daring vanities,* the raiſing of any new Sect, upon the ruins of Antiquity; *and every where endeavours to improve the labours of Ancient and Modern Writers, and ſo muſt he do who defends him, if he underſtands the buſineſs he goes about. The point is not, touching what is already done; nor of the Abilities of the Agents; nor of the capacity of their Inſtruments; which could not be undertaken without emulous compariſons, both of Perſons, Actions and Things: but the point is touching* propagation and advancement of Knowledges; *the improvement, and not the conſervation only of the Patrimony of our Anceſtors: and that by opening to the* underſtanding *a different way, that hath been known to former Ages; and clearing* that glaſs *to the letting in of a more plentiful light. The ways and ends of theſe two knowledges (I mean of what we have, and of what we may have) thus different; and the princi-*

ples upon which they proceed ſo divers; both may conſiſt without contradictions and confutations; or the invaſions upon their diſtinguiſht rights: and ſo the propagation of Knowledge, *by the aſſiſtance,* of the Father of Lights, *may be purſued, with the reſervation of the honour of Ancient and Modern Authors, and the Arts in uſe, which reſpecting the end whereto they were inſtituted, Diſputation, Redargution, and the like, are very conducent, and in their way of perfection highly exalted. And this is the firſt motive of deliberating the publication of my Apologetick, the difficulty of the buſineſs.* Another is this. *The times into which we are fallen, are learned Times, as ever were ſince the Grecian Philoſophers, and, their ſeconds, the Arabian Writers, which alſo through the great advantages of the experiments of later Ages, and the directions of Antiquity, in many particulars have out-gone their Predeceſſors; ſo as he that dare adventure, as, ſome do, to intrude unſtudied thoughts upon ſo learned an Age as this is, neither reverences the age as he ought, nor wiſely conſults his own reputation with Poſterity. And as the Times are learned, ſo (which too frequently falls out) ſomewhat confident. Great Wits, and which have fortified their conceptions by books and ſtudy, are ſtrongly prepoſſeſt with almoſt impregnible anticipations; and not ſo eaſily induced, as more inconcerned and diſengaged natures are; to know or unknow any thing, that either ſhould be farther inquired into, or ſhould be forgotten. And much within theſe two Orbs our Apology moves; in diſcovery of Ignorance, and of Error; of what we know not, and of what we ſhould not know. For certainly much knowledge remains yet conceal'd, and the way to this diſcovery is by foregoing many unprofitable ſubtilties; and by a learn'd ignorance falling off from many aery ſpeculations to the ſolid ſimplicity of the Ancients. Were we to compaſs a Panegirick in praiſe of the perfections of the learning of our days, which indeed merits ſuch a ſacrifice, the labour were but half what it is, for laudatory hymns ſeldom come out of ſeaſon; they need no preparations, and what might be wanting in the weight of ſpeech, would be ſupplied by an aptitude to accept and believe. But in the buſineſs in hand, the* mind

mind of man, *the principal ſubject to be wrought upon, and* her ſpeculations, *both which we ſo admire, are ſo immur'd and block't up with corrupt notions, either from the placits of Philoſophers, the depraved Laws of Demonſtration, or from inherent qualities in the general nature of man, or individuate temperature of particulars; that nothing can be done until theſe be convinced; at leaſt, ſubjected to examination: which is another motive that ſtays me upon the Land.* An other Reaſon (*which is the laſt I will trouble the Reader withall*)*is this. Time the meaſure of all our Actions, without whoſe aſſiſtance our beſt conceptions are* Abortives, *by the intercurrence of other engagements (which I might have diſpenced withall, had I rightly underſtood the ſervile tenure of ſecular contracts*)*hath ſurpriz'd me. I conceive, which I pronounce with ſome paſſion, that a Scholar for his ſtudies had been the maſter of his own hours; but he that traficks with the world ſhall find it otherwiſe. Time which I preſum'd I could command, and ſtay as I do my Watch, hath commanded me. And theſe diverſions were ſeconded* (Humane Reader) *by a ſad Accident. It pleaſed God in the heat of my attendance on this buſineſs, to take away, by one of the terrors of mortality, the* Stone, *my dear brother Sir* Richard Scot, *ſervant to the moſt eminent* Lord, *the* Lord Deputy General of Ireland; *beloved of his dear* Lord *to the lateſt minute of life; honour'd with his preſence to the fartheſt confines of mortality; and there, by his Noble Piety, deliver'd up, with as much ſolemnity, as a Kingdom could confer, unto the immortality of another World. This deadly ſhaft paſſing through him, ſo wounded me, that I my ſelf was arrived within few paces of the land of darkneſs. In his* ſilent *Marble, the beſt part of that ſmall portion of joy I had in the World; but* all my hopes *are entombed. This penſive caſualty ſo took me off from books and buſineſs, as for ſome months after, I could reliſh no thoughts but what were mingled with the contemplations of mortality.*

Sic fugit interea fugit irrevocabile tempus.

Theſe were the impediments to my APOLOGETICK;

which (if what is done be accepted) ſhall be prefixt the NOV. ORG. *For of this Tranſlation this is the firſt part* (Reader) *if it pleaſe thee; if it pleaſe thee not, the laſt. But before I take my leave, here are ſome tacite objections, which I would meet half way, and and ſo weaken their approaches, leſt they fall too heavy upon me.* The firſt is, *touching the* Diviſion of the firſt book into Chapters, *contrary to the mind of the Author, and the intention of the work. This exception may be thus ſatisfied, That profit is to be preferred before artificial contrivance, where both cannot ſo conveniently be had; and to this end, diſcretion to be followed before rule. Were the Author now alive and his vaſt deſigns going on, this alteration had been ſomewhat bold: but the inimitable Architect now dead, having perfected little more than the outward Courts, as it were, of his magnificent Inſtauration; and the whole ſumm of Sciences, and the ſtock of Arts in preſent poſſeſſion, not able to defray the charges of finiſhing this Fabrick; I thought fit, by compartitions and diſtributions into ſeveral rooms, to improve what we have, to our beſt advantage, ſo it might be done without prejudice to the Authors procedure, and apt coherence, which I hope it is: Having reſpect herein rather to accommodation than decoration; for* Houſes (*as our Author ſays*) are built to live in, and not to look on, and therefore uſe to be preferred before uniformity. *Another exception may be made againſt the draught of the Platform into* Analitick Tables, *which ſeems ſomewhat pedantick, and againſt that common rule,* Artis eſt diſſimulare Artem. *To this I anſwer thus.* Order *and dependance is, as it were, the ſoul of the World, of the Works of Nature and Art, and that which keeps them united, without which all would fall aſunder, and become like the firſt Chaos before the production of light. And of all* Methods *that ever were, at leaſt that ever came to our hands, our Authors is the moſt natural, and moſt dependent. For* Truth, *as it reflects on us, is a congruent conformity of the Intellect to the Object; and of the different faculties thereof to the difference of things: wherefore the trueſt* Partition *of humane Learning, is that, which hath reference to humane faculties; when the* Intellectual Globe, *and the* Globe of

the

the World, *intermix their beams and irradiations in a direct line of projection, to the Generation of Sciences. This our Author hath perform'd to admiration; and in this gone beyond all Antiquity, yet upon their grounds; wherein he can never be out-gone, unleſs followed by Poſterity. The Ancients indeed were men of moſt profound ſpeculations, but in the delivery of themſelves, ſomewhat involv'd, as appears by* Plotinus, Proclus, Triſmegiſtus *and others; and many of* Platoes *School writ Dialogue-wiſe, which is no doctrinal way. As for* Ariſtotle, *his precepts touching* Method *(if any ſuch book was written) they are periſht, ſaving where he ſcatters ſuch rules here and there, which ſhould have been ſilenced, and are not ſo well followed by himſelf. And for the* Methods *of the Moderns,* Ramus *and others, by the improvement of* German *Writers, impair'd; they knit the limbs of knowledge too ſoon; have bedwarfed Sciences,* and are become an Art (*as learned* Hooker *expreſſes it*) which teaches the way of ſpeedy diſcourſe, and reſtrains the mind of man, that it may not wax over-wiſe. *The* Excellency *therefore of our Authors* Partitions, *induced me to theſe* delineations, *for their uſe only, who have not the leaſure, or patience to obſerve it according to the merit; that by this* Anatomy, *the junctures and arteries, as it were, of this great body might more viſibly appear.* Another objection is, *touching the* Allegations in the Margin, *contrary to the ſolemn cuſtom of Antiquity, and the moſt of graver Authors.* For this *I had theſe reaſons. It pleaſed our Author, though he was himſelf a living fountain of Knowledge, and had a wealthy ſtock of his own, yet to taſte of other waters, and to borrow from Antiquity, and to acknowledge ſuch borrowings; He thus naming his Authors, I thought fit to note them. And as he was a man of a moſt elevated phanſie and choice conceptions, ſo was he in the ſelection of his Authors, and the paſſages he pleas'd to make uſe of: and it is worth the labour to know with whom ſuch great Wits uſe to converſe; to point to the* Mines *where they dig their Ore; and to the ſhadows where they repoſe at noon. And as his ſelection of Authors was very choice, ſo was his application of their ſayings, very curious; and in a ſtrain beyond the vulgar reach. Places out of* Sacred Scriptures *are ſo expli-*

cated

cated, ſo applyed, as you may ſearch all the Commenters that are extant, and not find the like expoſitions, as you ſhall find in him. As for humane Authors he betters his borrowings from them; teaching the allegations out of them, a ſence above the meaning of him that lent it him; and which he repairs too with double intereſt for what he borrowed. Theſe conſiderations invited me to Marginal Citations. Theſe Reaſons ſet apart, I cannot approve this weak ambition; and do, not without cenſure, read Modern Authors proſtitute to humane allegations; as if the Truth *they deliver, were to be tryed by voices; or having loſt its primitive Innocence, muſt be cover'd with theſe fig-leaves; or as if the Authors themſelves were afraid that it ſhould make an eſcape out of their* Text, *if it were not beſet in the Margin with Authorities as with a Watch.* The laſt exception is, *touching the* Prefaces, *and other* Introductions *prefix'd this work, that make the Gates and Entries ſo wide, as they ſeem to invite the City to run away. This is thus anſwer'd. It muſt be remembred that this work in the Deſign was very ſpacious; and is in the performance of what is done ſo ample, that when the ſecond and third Parts ſhall be added, (as added they will be) the* Porches *and* Ingreſſes, *in the judgement of any good Architect, are proportionable enough. And if our* Authors *rule hold, that every fair Fabrick ſhould have three Courts; a green Court, a ſecond Court more garniſht, and a third to make a ſquare with the Front; then have you here this Epiſtle as the mean Court, Judgements upon this Author living and dead, as the middle Court; and the Authors own excellent Preface to confront with the work it ſelf.* Now I ſhould *ſay ſomething touching* Tranſlation; *and as it is mine. The very Action is ſomewhat obnoxious to cenſure; being of the nature of thoſe, the falling whereof may diſgrace more, than the carrying of it through, credit the undertaker. But, beſides the conſcience of the deed done; for other ends I could not have; (the Author now dead, and alive* mihi nec injuriis nec beneficiis notus) *and that to be a* Tranſlator *is more than to be an* Author, *ſome ſuch as there be; and that it is no ſuch mean office, to bear a light before a* Lord Chancellor of England: *I ſhould excuſe it, were the example mine: ſo, writes learned* Sa-

vil

vil; *ſo, eloquent* Sandys; *ſo,* Malvezzi's Noble Interpreter; *with whom conferred I am leſs than a ſhadow: So, many able and eminent names of* France *and* Italy, *and other Nations; So the Ancients of former Ages and of all Arguments. But if any be ſo ſolemn, ſo ſevere, and of ſuch primitive taſtes, they can away with no waters, which come not from the ſpring-head; nor endure to drink of* Tiber, *that paſſes through* Thames; *They may give over here, if they ſo pleaſe, and proceed no farther. This interpretation was not meant for ſuch faſtidious palates, and yet, it may be, for as diſtinguiſhing as theirs are. Now if this very action be thus liable to exception, much more muſt my performance be. Certainly books by* Tranſlation *commonly take wind in the effuſion; and for ſtrength fall ſhort of their* Originals; *as reflexed beams are weaker than direct: but then it muſt be underſtood of* Originals, *truly ſo. For if a* Writer *deliver himſelf out of his Native Language, I ſee not why a* Tranſlator *rendring him in it, may not come near him: and in this caſe, the Author himſelf is the* Interpreter, *being he* tranſlates *his own thoughts, which originally ſpeak his mother tongue. Yet for all this, Errors I know there are, and ſome lapſes, which require a connivence; and a Reader hath this advantage, that he may ſtay upon one period, as long as an Interpreter did on one page; beſides his peculiar Genius to ſome ſtudied paſſages. Some Errors (paſſing but a traſient eye upon what is done) I ſee already; and could note them; but I would not willingly gratifie ſome kind of Readers ſo far. They that are Judicious and Ingenious too (for I would have no Readers that have not theſe two ingredients in their compoſitions, though ſometimes I name but one, which I would then, ſhould be predominant) will in their judgement find them, and in their mercy pardon them.* As for Sophiſts *and* Satyriſts, *a degenerate Race of men, that ſit upon the lives and learning of all that write; who reſolv'd to do nothing themſelves, may with more ſecurity cenſure others: and them too, who, as* Learned Don *deciphers them*, forbid not books, but men; damning what ever ſuch a name, hath, or ſhall write: *they are* things *below the merit of my indignation; objects of ſcorn; which a little ſlighted, and not inflamed*

by

by oppoſition, or countenanced to a reply by confutation, will within a while, of themſelves, extinguiſh and vaniſh : like ſome diſperſed roving winds, which without encounter are diſpirited and die. And it concerns me, Courteous Reader, to put on ſuch a confidence as this; for being I am likely to appear in mine own perſon, as I do now in the perſon of another; to be too tender-fronted were to invite injuries, and to proſtitute ſuch unſeaſonable modeſty to abuſe. He that will to ſea, muſt look for ſome cloudy days; and to be too ſcrupulous *or* Ceremonious *touching* Times *or* Perſons, *is the bane of buſineſs, and of all well-meant endeavours : according to that of* Solomon, Qui obſervat ventum non ſeminat, & qui conſiderat nubes, nunquam metet.

TESTI-

TESTIMONIES
CONSECRATED
To the
MERIT
OF THE
INCOMPARABLE PHILOSOPHER
Sir *FRANCIS BACON*,
BY
Some of the Beſt-learn'd of this inſtant Age.

ALthough *ſevere Inquiſitors of truth*, and ſuch who by their learned Labours ſtand upon publick Record in the approv'd Archives of Eternity, may, in an humble diſtance, lay claim and title to that ſacred Prerogative— *Ego autem ab homine Teſtimonium non Capto; ipſa enim Opera quæ facio teſtantur de me*;—— yet becauſe ſuch *Great Authors*, in their high flight, are ſo leſſen'd in the air of unfrequented contemplations; and take ſuch unbeaten ways, as they become the *weak wonder* of common Capacities, accuſtom'd to popular opinions, and authoriz'd Errors: and in this admiring Ignorance, the *prejudicate objects* of Emulation, Envy, Jealouſies, and ſuch like impotent paſſions: It ſeems (in a ſort) neceſſary, that the way be clear'd before ſuch Writers; and that they enter the Theatre, as well with the ſuffrage of *voice*, to gain upon the *will*; as with the ſtrength of *Reaſon*, to convince the *Underſtanding*.

Wherefore, not ſo much for the honour of this Author, (though that is intended too) as for the aid of ſome anticipate Readers, not yet manu-miſſed from a ſervile belief to the liberty of their own judgements, (ſuch, I mean, as are yet under the minority of an implicite faith,) I thought good to deliver this imperfect liſt of *Deponents*, which the precipitancy of this Edition, would not permit to fill up with ſome other *great Names*, both of this Kingdom, and of forreign Nations. What is wanting here to the accompliſhment of this *Catalogue*, Time, *the Parent of Truth*, ſhall conſummate.

Le Sieur Maugars Counſellor and Secretary to the King of *France*,

in the Epiſtle to his Tranſlation of a Part of this Work, gives our Author this Teſtimony.

Amongſt whom every one knows that Sir Francis Bacon, *by many degrees off, holds the firſt rank, both for the vivacity of his Spirit, eminency of his Learning, Elegancy of his ſtile. I have ſtudied with diligence all his writings; and preſume I may do a performance of ſome merit and acceptation, in preſenting to my Country his Books of the* Advancement of Learning, *a Work hath not been ſeen in our Language. This is the* Book *which I have cauſed to paſs the Seas; not as the gold of the* Indies, *to cheriſh vice, and corrupt our Manners; but as a ſoveraign Plant of ſingular vertue, to cure the wounds which ignorance and Pedantiſm have given* humane Sciences.

Mr. Peirre D' Ambois. Sr de la Magdelaine, in his juſt and elegant diſcourſe upon the life of our *Author*, delivers his cenſure thus:

Judgement and Memory never met in any man in that height and meaſure they met in him; ſo as in ſhort time he became Maſter *of all thoſe* Knowledges *which are learnt in Schools.*

A page after; *but as he ever valued himſelf, rather born for other men, than himſelf; now that he could not, for want of imployment, any longer endow the publick with his* Active perfections; *he was deſirous at leaſt to become profitable in a* Contemplative way, *by his writings and by his books, monuments certainly meriting to find entertainment in all the Libraries of the world; and which deſerve to be ranged with the faireſt works of Antiquity.*

The ſame noble French-man in his Advertiſement to our Authors *Nat. Hiſtory* thus expreſſes him.

For this Natural Hiſtory, *where the quality of Metals, the Nature of Elements, the Cauſes of Generation and Corruption, the divers actions of Bodies one upon another, and ſuch like impreſſions, are diſcourſed with ſuch life and light, that he may ſeem to have learn'd his knowledge* even in the School of the Firſt Man. *And though herein he may be thought to have paſs'd upon the breaches of* Ariſtotle, Pliny *and* Cardan; *yet notwithſtanding he borrows nothing from them: as if he had a deſign to make it appear, that thoſe great men have not ſo entirely poſſeſt themſelves of this ſubject, but that there remains much to be diſcover'd. For my part, though it be far from my intention, to raiſe the reputation of this* Author *upon the ruins of* Antiquity; *yet I think it may be avouched upon the grounds of reaſon, that in this preſent Argument he hath ſome advantage of them: being that the moſt of the* Ancients *which have written of* things Natural, *have ſatisfied themſelves in reporting things, as the information of others hath given them intelligence; and conſidering, that oftentimes that which is deliver'd them for* Hiſtory, *is far eſloign'd from all verity; they have choſen rather, by reaſons to confirm the reſolutions of another, than to make an exact enquiry, and diſcovery themſelves. But* Monſieur Bacon *not relying upon the meer word and credit of ſuch as went before him, will have* Experience *joyn'd with* Reaſon; *and examines the receiv'd principles of the Schools, by the effects of Nature; the ſpeculations of the* Intellectual Globe, *by the operation*

operations of the Corporal. *By this means he hath found out so many rare secrets, whereof he hath bequeath'd us the invention; and made many axioms acknowledged for false, which hitherto have gone current amongst Philosophers, and have been held inviolable.*

Tob. Adami, in his Preface to the *Realis Philosophia*, of that excellent Philosopher *Campanella* (who lives to enjoy that Fame, which many eminent for their Learning, rarely possess after death) speaks his opinion thus.

We erect no Sect, establish no Placits of Heresie, but endeavour to transcribe universal and ever-veritable Philosophy out of the Ancient Original Copy of the World: not according to variable and disputable speculations, but according to the Conducture of sense and irrefragable depositions of the Architect himself, whose hands in works, dissents not from his word in writing. And if the great Instauration *of the deep-mining Philosopher*, Francis Bacon, Lord Verulam, Chancellor of England, *a work of high expectation, and most worthy, as of consideration, so of assistance, be brought to perfection, it will perchance appear, that we pursue the same ends; seeing we tread the same foot-steps in tracing, and, as it were, bounding nature, by* Sence *and* Experience, *&c.*

Sr. *Tob. Mathews*, in his Epistle to the Duke of *Florence* prefixt his Italick Translation of my *Lord Bacon's Essays*, amongst other Elogies decyphers him thus.

St. Austin *said of his illegitimate son*, Horrori mihi erat illud ingenium, *and truly I have known a great number whom I much value, many whom I admire, but none who hath so astonisht me, and, as it were, ravisht my senses, to see so many and so great parts, which in other men were wont to be incompatible, united, and that in an eminent degree in one sole Person. I know not whether this truth will find easie belief, that there can be found a man beyond the* Alpes, *of a most ready wit; most faithful memory; most profound judgement; of a most rich and apt expression; universal in all kinds of knowledge, as in part may be seen by that rare incomparable piece, the* Advancement of Learning, *which future Ages shall render in different languages: But be the faith of other Nations what it will in this point, the matter I report is so well understood in* England, *that every man knows and acknowledges as much, nay, hath been an eye and ear-witness thereof; nor, if I should expatiate upon this subject, should I be held a flatterer, but rather a suffragan to truth.*

Mr. *George Sandys* in his excellent Commentaries on his inimitable Translation of the stately *Metamorphosis*, rendred in an equal felicity of expression, to the eternal fires of that *sweet-tongu'd Roman*; often cites the judgement of our Author, from whose sentence he never appeals, but rather adores as an Oracle; and in an ingenious acknowledgement of assistance from him, thus delivers him to posterity.

Of Modern writers I have receiv'd the greatest light from Geraldus, Pontanus, Ficinus, Vives, Comes, Scaliger, Sabinus, *and the* Crown of the later, the Vicount of St. *Albans*; *assisted, though less constantly*

conſtantly, by other Authors, almoſt of all Ages and Arguments. Having been true to my firſt purpoſe, in making choice, for the moſt part, of thoſe interpretations, which either bear the ſtamp of Antiquity, *or receive eſtimation from the* honour of the Author.

Marin Merſenne, An able man, but a declar'd adverſary to our Authors deſign (whoſe Arguments I ſhall encounter in my Apologetick for the *Inſtaur. of Sciences*) in his Book of the *Verity of Sciences* againſt the *Scepticks* and *Pyrrhonians*, *Lib.* I. *Cap.* XVI. acknowledges thus much, which coming from an Adverſary is therefore more valid.

Verulam, *ſeems to have no other intention in his* New Method, *then to eſtabliſh the* Verity of Sciences; *wherefore you muſt not anticipate, as granted, that he makes for you, or that he is of your opinion; he confeſſes we know little, but he ſubverts not the Authority of* Senſe *and of* Reaſon, *no, he labours to find out proper and proportionable inſtruments, whereby to conduct the underſtanding to the knowledge of Nature and her effects.*

The Authors Cenſure upon himſelf.

For in my judgement, it is a matter which concerns not only the Benefit of others; but our own Repetition alſo; that no man imagine that we have projected in our minds ſome ſlight ſuperficial notion of theſe Deſigns; *and that they are of the nature of thoſe things, which we could* Deſire, *and which we accept only as* good wiſhes. *For they are ſuch as without queſtion, are within the power and poſſibility of men to compaſs, unleſs they be wanting to themſelves; and hereof, we for our parts, have certain and evident demonſtration*; for we come not hither, as Augures, to meaſure Countries in our mind, for Divinations; but as Captains, to invade them for conqueſt.

His anſwer to ſome Tacite Objections.

I do foreſee that many of thoſe things which I ſhall regiſter as Deficients *will incur divers cenſures; as* that ſome parts *of this enterprize were done long ago, and are now extant*; others, *that they taſte of curioſity and promiſe no great fruit*; others, *that they are impoſſible to be compaſſed by humane induſtries.* For the two firſt, *let the particulars ſpeak for themſelves.* For the laſt touching impoſſibilities, *I determine thus. All thoſe things are to be held poſſible and performable which may be accompliſht by ſome perſon, though not by every one; and which may be done by the united labours of many, though not by any one apart, and which may be effected in a ſucceſſion of Ages, though not in the ſame Age; and in brief, which may be finiſht by the care and charge of the publick, though not by the abilities and induſtry of private perſons. If for all this there be any, who would rather take to himſelf that of* Solomon, Dicit Piger, Leo eſt in via, *than that of* Virgil

Poſſunt quia poſſe videntur——

it is enough for me, if my labours may be eſteemed as votes, yet the better ſort of wiſhes: for as it asks ſome knowledge to demand a Queſtion not impertinent; ſo it requires ſome underſtanding, to make a wiſh not abſurd. *Proem. lib.* 2.

IN

IN HONOREM

ILLUSTRISSIMI DOMINI

FRANCISCI

DE

VERULAMIO

Vice-Comitis Sti *ALBANI:*

Poſt Editam ab eo INSTAUR. MAG.

QVis iſte tandem? non enim vultu ambulat
Quotidiano. Neſcis Ignare? audies:
Dux Notionum; veritatis Pontifex;
Inductionis Dominus; & Verulamii;
Rerum Magiſter unicus, at non Artium:
Profunditatis Pinus; atq; Elegantiæ:
Naturæ Aruſpex intimus: Philoſophiæ
Ærarium: Sequeſter Experientiæ,
Speculationiſq;: Æquitatis Signifer:
Scientiarum ſub pupillari ſtatu
Degentium olim Emancipator: luminis
Promus: Fugator Idolûm, atq; Nubium:
Collega Solis: Quadra Certitudinis:
Sophiſmatum Maſtix: Brutus Literarius,
Authoritatis exuens Tyrannidem:
Rationis & ſenſus ſtupendus Arbiter;
Repumicator Mentis: Atlas Phyſicus,
Alcide ſuccumbente Stagiritico:
Columba Noæ, quæ in vetuſtis Artibus
Nullum locum, requiemve Cernens, præſtitit.
Ad ſe ſuamq; Matris Arcam regredi.
Subtilitatis terebra; Temporis nepos
Ex veritate matre: Mellis Alveus.

Mundiq;

Mundiq; & Animarum, ſacerdos unicus:
Securis Errorum: inq; Natalibus
Granum ſinapis, acre aliis, Creſcens ſibi.
O me, propè Laſſum; Juvate Poſteri.

GEOR. HERBERT Orat. Pub.
in Academ. Cantab.

MANES

MANES

VERULAMIANI:

SIVE

IN OBITUM

INCOMPARABILIS

FRANCISCI

DE

VERULAMIO, &c.

EPICEDIA.

INCLYTA Academia CANTABRIGIENSIS, cujus felicitas fuit, *viro* ad salutem scientiarum *nato*, primas sapientiæ mammas præbere; ac *Philosophum*, post occasum Græciæ, *maximum*, orbi dare: super funus Alumni sui Lacrymas effudit, doctas ac duraturas mœstitias. Ex hoc integro Musarum fonte, modica hæc sed facunda fluenta, collegit *interpres*; ut quod, viventi, seculum dederat decus, glisscente adhuc invidiâ; & morienti dedisse constaret, cessante nunc adulatione. Reliqua sui nominis æternitati consecranda, continuatâ seculorum serie ad ultimas usq; mundi favillas, rependet posteritas: Quis supremam suis laudibus manum imponet, novit tantum *Fundator ille, ac simul eversor Seculorum.*

Adhuc

Adhuc ſuperbis inſolente purpurâ
Feretri rapinis Inclitos in tot viros
Sterile Tribunal? cilicio dicas diem,
Saccúmq; totam facito luxuriem fori.
A Themide libra *nec geratur penſilis,*
Sed urna, *prægravis urna* Verulamii.
Expendat. Eheu! Ephorus haud lancem premit,
Sed Areopagus; nec minor tantus ſophos,
Quàm Porticus bracchata. Nam veſter, ſcholæ,
Gemiſcit axis, tanta dum moles ruit.
Orbis ſoluta cardo litterarii,
Ubi ſtudio coluit togam & trabeam pari.
Qualis per umbras Ditis Euridice vagans
Palpare geſtiit Orphëum, quali Orphëus,
Saliente tandem (vix prius criſpâ) Styge,
Alite fibras lyræ titillavit manu;
Talis plicata Philologωn ænigmatis
Petiit Baconum vindicem, tali manu
Lactata criſtas extulit Philoſophia,
Humiq; ſoccis reptitantem Comicis
Non proprio Ardelionibus molimine
Sarſit, ſed Inſtauravit. *Hinc politiùs*
Surgit cothurno celſiore, & Organo
Stagirita Virbius reviviſcit Novo.
Calpen ſuperbo Abylámq; vincit remige
Phœbi Columbus, artibus novis, Novum
Daturus Orbem; *promovit conamina*
Juvenilis ardor, uſq; ad invidiam trucem
Fati minacis. Quis Senex *vel* Hannibal,
Oculi ſuperſtitis timens caliginem,
Signis Suburram ventilat victricibus?
Quis Milo inultus quercubus bilem movet,
Senecta tauro gibba cùm gravior premit?
Dum noſter Heros traderet ſcientias
Æternitati, prorſus expeditior
Sui Sepulchri comperitur artifex.
Placida videtur Ecſtaſis ſpeculatio,
Quâ mens tueri volucris Idæas boni
In lacteos properat Olympi tramites.
His immoratur ſedibus Domeſtica,
Peregrina propriis. Redit. Jocularitèr
Fugax; vagatur rurſus, & rurſus redit.
Furtiva tandem ſeriò, ſe ſubtrahit
Totam; gementi, morbido cadaveri
Sic deſueſcit anima, ſic jubet mori.
Agite lugubres Muſæ, & à Libani jugis
Cumulate thura, Sydus in pyram illius
Scintillet omne; ſcelus ſi accendi rogum
Regum Prometheo culinari foco.

Et ſi quà fortè ludat in cineres ſacros
Aura petulantior, fugamq; ſuadeat,
Tunc fiete; lacrymis in amplexus ruent
Globuli ſequaces. Denuò fundamine
Ergaſtuli everſo radicitùs tui
Evehere fœlix anima, Jacobum *pete,*
Oſtende, & illuc, civicam fidem *ſequi.*
E Tripode juris, dictites oracula
Themidos *aluminis. Sic* (*Beati cœlites*)
Aſtræa *priſtino fruatur vindice,*
Vel cum Bacono rurſus Aſtræam date.

R. P.

AUdax exemplum quò Mens humana feratur,
Et Sæcli vindex ingenioſe tui;
Dum ſenio macras recoquis fœliciter artes,
Subtrahis & priſco libera colla jugo;
Quo deflenda modo veniunt tua funera? quales
Expoſcunt lacrymas, quid ſibi fata volunt?
An timuit Natura parens ne nuda jacéret,
Detraxit veſtem dum tua dextra ſacram?
Ignotiq; oculis rerum patuere Receſſus,
Fugit & aſpectum Rimula nulla tuum?
An verò, Antiquis olim data Sponſa Maritis,
Conjugis amplexum reſpuit illa novi?
An tandèm damnoſa piis atq; invida cæptis,
Corripuit vitæ fila (trahenda) tuæ?
Sic ultra vitreum Siculus *ne pergeret orbem* Archim.
Privati cecidit militis enſe Senex.
Tuq; tuos manes ideò (Franciſce) *tuliſti,*
Ne, non tentandum, perficeretur opus.

SUnt qui defuncti vivant in marmore, & ævum
Annoſis credant poſtibus omne ſuum:
Ære micant alii, aut fulvo ſpectantur in auro,
Et, dum ſe ludunt, ludere fata putant.
Altera pars hominum, numerosâ prole ſuperſtes,
Cum Niobe *magnos temnit iniqua* Deos.
At tua cælatis hæret nec Fama Columnis,
Nec tumulo legitur, Siſte viator iter:
Si qua Patrem proles referat, noncorporis illa eſt,
Sed quaſi de cerebro nata Minerva Jovis.
Prima tibi virtus monumenta perennia præſtat,
Altera, nec citiùs corruitura, Libri:
Tertia Nobilitas; ducant jam fata triumphos,
Quæ (Franciſce) *tui nil niſi corpus habent.*

Utraq; pars melior, Mens & bona Fama ſuperſunt,
Non tanti ut redimas vile cadaver habes.

T. Vincent. T. C.

MUſæ *fundite nunc aquas perennes*
In Threnos, Lacrymáſq; Apollo *fundat*
Quas vel Caſtalium *tenet Fluentum:*
Nam Letho neq; convenire tanto
Poſſint nænia parva, nec coronent
Immenſa hæc medicæ ſepulchra guttæ:
Nervus ingenii, Medulla ſuadæ
Dicendiq; Tagus, *reconditarum*
Et gemma pretioſa Literarum,
Fatis concidit, (heu trium Sororum
Dura ſtamina) Nobilis Baconus.
O quam te memorem Bacone *ſumme*
Noſtro carmine! & illa glorioſa
Cunctorum monumenta ſeculorum,
Excuſa ingenio tuo, & Minervâ!
Quam doctis, elegantibus, profundis,
Inſtauratio Magna, *plena rebus!*
Quanto lumine tineas Sophorum
Diſpellit veterum tenebricoſas
Ex chao pocreans novam σοφίαν:
Sic ipſe Deus inditum ſepulchro
Corpus reſtituet manu potenti:
Ergo non moreris (Bacone) *nam te*
A morte, & tenebris, & a ſepulchro,
Inſtauratio Magna *vindicabit.*

R. C. T. C.

PArcite: *Noſter amat facunda ſilentia luctus,*
Poſtquam obiit ſolus dicere qui potuit:
Dicere, quæ ſtupeat Procerum generoſa corona,
Nexaq; ſollicitis ſolvere Jura reis.
Vaſtum opus. At noſtras etiam Verulamius *artes*
Inſtaurat *veteres, condit & ille novas.*
Non quâ majores: Penitos verum ille receſſus
Naturæ, *audaci provocat ingenio.*
Aſt Ea, ſiſte gradum, ſeriſq; nepotibus, (*inquit,*)
Linque quod inventum ſæcla minora juvet.
Sit ſatis, his ſeſe quod nobilitata Juventis,
Jactent ingenio tempora noſtra tuo.

Et

Eſt aliquid, quo mox ventura ſuperbiet ætas;
Eſt, ſoli notum quod decet eſſe mihi:
Sit tua laus pulchros Corpus duxiſſe per artus,
Integra cui nemo reddere membra queat:
Sic opus artificem infectum commendat Apellem,
Cum pingit reliquam nulla manus Venerem.
Dixit, & indulgens cæco Natura *furori,*
Præſecuit vitæ Filum Operiſq; ſimul.
At Tu, qui pendentem audes detexere telam,
Solus quem condant hæc monumenta ſcies.

H. T. Coll. Trin. Socius.

DUm moriens tantam noſtris Verulamius Heros
Triſtitiam Muſis, *luminaq; nda facit:*
Credimus heu nullum fieri poſt fata beatum,
Credimus & Samium *deſipuiſſe ſenem.*
Scilicet hic miſeris, fœlix nequit eſſe, Camænis,
Nec ſe quàm Muſas *plus amat iſte ſuas.*
At luctantem animam Clotho *imperioſa coëgit*
Ad cœlum, invitos traxit in aſtra pedes.
Ergone Phœbeias *jacuiſſe putabimus artes?*
Atq; herbas Clarii *nil valuiſſe Dei?*
Phœbus *idem potuit, nec virtus abfuit herbis,*
Hunc artem, atq; illas vim retinere putes:
At Phœbum (*ut metuit ne Rex foret iſte* Camænis)
Rivali medicam crede negâſſe manum.
Hinc dolor eſt; quod cum Phœbo Verulamius Heros
Major erat reliquis, hâc foret arte minor.
Vos tamen ô, tantum Manes atq; Umbra, Camænæ,
Et pœnè inferni pallida turba Jovis,
Si ſpiratis adhuc, & non luſiſtis ocellos,
Sed neq; poſt illum vos ſupereſſe putem:
Si vos ergo aliquis de morte reduxerit Orpheus,
Iſtaq; non aciem fallit imago meam:
Diſcite nunc gemitus, & lamentabile carmen,
Ex oculis veſtris lacryma multa fluat.
En quam multa fluit? veras agnoſco Camænas
Et lacrymas, Helicon *vix ſatis unus erit;*
Deucalionæis *& qui non merſus in undis*
Pernaſſus (*mirum eſt*) *hiſce latebit aquis.*
Scilicet hic periit, per quem vos vivitis, & qui
Multâ Pierias *nutriit arte* Deas.
Vidit ut hic artes nullâ radice retentas,
Languere ut ſummo ſemina ſparſa ſolo;
Creſcere Pegaſeas *docuit, velut Haſta* Quirini
Crevit, & exiguo tempore Laurus erat.

Ergo Heliconiadas *docuit cùm creſcere* divas,
Diminuent hujus ſecula nulla decus.
Nec ferre ulterius generoſi pectoris æſtus
Contemptum potuit, Diva Minerva, *tuum.*
Reſtituit calamus ſolitum divinus honorem,
Diſpulit & nubes alter Apollo *tuas.*

Diſpulit & tenebras ſed quas obfuſca vetuſtas,
Temporis & priſci lippa ſenecta tulit;
Atq; alias methodos ſacrum inſtauravit acumen,
Gnoſſiaq; *eripuit, ſed ſua fila dedit.*
Scilicet antiquo ſapientûm vulgus in ævo
Tam claros oculos non habuiſſe liquet;
Hi veluti Eoo *ſurgens de littore* Phœbus,
Hic velut in mediâ fulget Apollo *die:*
Hi veluti Typhis *tentârunt æquora primùm,*
At vix deſeruit littora prima ratis,
Pleiadas *hic* Hyadaſq; *atq; omnia ſidera noſcens,*
Syrtes *atq; tuos, improba* Sylla, *canes;*
Scit quod vitandum eſt, quo dirigat æquore navem,
Certiùs & curſum nautica monſtrat acus:
Infantes illi Muſas, *hic gignit adultas;*
Mortales illi, gignit at iſte Deas.
Palmam ideò reliquis Magna Inſtauratio *libris*
Abſtulit, & cedunt ſqualida turba ſophi.
Et veſtita novo Pallas *modo prodit amictu,*
Anguis depoſitis ut nitet exuviis.
Sic Phœnix *cineres ſpectat modò nata paternos,*
Æſonis *& rediit prima juventa ſenis.*
Inſtaurata ſuos & ſic Verulamia *muros*
Jactat, & antiquum ſperat ab inde decus.

Sed quanta effulgent plus quam mortalis ocelli
Lumina, dum regni myſtica ſacra canat?
Dum ſic naturæ leges, arcanáq; Regum,
Tanquam à ſecretis eſſet utriſque, canat:
Dum canat Henricum, *qui Rex, idemq; Sacerdos,*
Connubio ſtabili junxit utramq; Roſam.

Atqui hæc ſunt noſtris longè majora Camænis,
Non hæc infœlix Granta, *ſed* Aula *ſciat:*
Sed cum Granta *labris admoverit ubera tantis*
Jus habet in laudes (maxime Alumne*) tuas.*
Jus habet, ut mœſtos lacrymis extingueret ignes,
Poſſet ut è medio diripuiſſe rogo.
At noſtræ tibi nulla ferant encomia Muſæ,
Ipſe canis, laudes & canis inde tuas.
Nos tamen & laudes, quâ poſſumus arte, canemus,
Si tamen ars deſit, laus erit iſte dolor.

Tho. Randolph. T. C.

Sic

Sic cadit Aonii *rariſſima Gloria cœtûs?*
Et placet Aoniis *credere ſemen agris?*
Frangantur Calami, diſrumpantúrq; libelli,
Hoc poſſint tetricæ ſi modo jure Deæ.
Heu quæ lingua ſilet, quæ jam facundia ceſſat,
Quò fugit ingenii Nectar & Eſca tui?
Quomodo Muſarum nobis contingit Alumnis
Ut caderet noſtri præſes Apollo *chori?*
Si nil cura, fides, labor, aut vigilantia poſſint,
Siq; feret rapidas, de tribus una, manus;
Cur nos multa brevi nobis proponimus ævo?
Cur putri excutimus ſcripta ſepulta ſitu?
Scilicet ut dignos aliorum à Morte labores
Dum rapimus, nos Mors in ſua jura trahat.
Quid tamen incaſſum nil proficientia fundo
Verba? quis optabit, te reticente, loqui?
Nemo tuum ſpargat violis fragrantibus urnam,
Nec tibi Pyramidum *mole ſepulchra locet;*
Nam tua conſervant operoſa volumina famam,
Hoc ſatis, hæc prohibent te monumenta mori.

Williams.

ORdine ſequeretur deſcriptio Tumuli VERULAMIANI, monumentum Nobiliſſ. MUTISII, in honorem domini ſui conſtructum; quâ pietate, & dignitatem Patroni ſui, quem (quod rari faciunt, etiam poſt cineres Coluit) conſuluit; Patriæ ſuæ opprobrium diluit; ſibi nomen condidit. Buſta hæc nondum in viſit Interpres, ſed inviſurus: Interim Lector tua cura Commoda, & abi in rem tuam.

Creſcit occulto velut Arbor ævo
Fama BACONI.——

FRAN-

FRANCISCUS

BARO DE *VERULAMIO*

Vice-Comes S^ti *ALBANI.*

ALMÆ MATRI INCYTÆ

Inclytæ Acad.

CANTABRIGIENSI. S.

DEbita Filii qualia poſſum perſolvo; quod vero facio, idem & vos hortor, ut *Augmentis Scientiarum* ſtrenuè incumbatis: & in Animi modeſtia libertatem ingenii retineatis: Neq; talentum à veteribus concreditum in ſudario reponatis. Affuerit proculdubiò & affulſerit Divini Luminis Gratia, ſi humilitâ

Academiæ.

OXONIENSI. S.

CUm *Almæ Matri* meæ inclytæ *Academiæ Cantabrigienſi* Scripſerim, deeſſem ſanè officio, ſi ſimule Amoris pignus ſorori ejus non deferrem. Sicut autem eos hortatus ſum, ita & vos hortor ut *Scientiarum Augmentis* ſtrenuè incumbatis, & veterum labores, neq; nihil, neq; omnia eſſe putetis; ſe vires etiam

tâ & ſubmiſsâ *Religioni Philoſophia* clavibus ſenſûs legitimè & dextrè utamini: & amoto omni contradictionis ſtudio, Quiſq; cum alio, ac ſi ipſe ſecum diſputet, *Valete.*

am proprias modeſte perpendentes, ſubinde tamen experiamini, omnia cedent quam optimè; ſi Arma non alii in alios vertatis ſed junctis copiis in Naturam rerum impreſſionem faciatis, ſufficit quippe illa Honori & Victoriæ, *Valete.*

FRAN

FRANCIS Lord *VERULAM*
Conſulted thus,

And thus concluded with Himſelf; the publication whereof he conceiv'd did concern the preſent and future AGE.

SEeing it was manifeſtly known unto him, that humane underſtanding creates it ſelf much trouble; nor makes an apt and ſober uſe of ſuch Aids, as are within the Command of Man; from whence infinite ignorance of Things; and from the ignorance of Things, innumerous diſadvantages; his opinion was, that with all our induſtry we ſhould endeavour, if happily that ſame Commerce of the Mind and of Things *(than which a greater bleſſing can hardly be found on Earth, certainly of earthly Felicities)* might by any means be entirely reſtored; at leaſt brought to terms of nearer correſpondence. *But that Errors, which have prevailed, and would prevail for ever, one after another, (if the mind were left free to it ſelf) ſhould rectifie themſelves, either by the inbred power of the underſtanding, or by the aids and aſſiſtances of Logick, there was no hope at all; becauſe that the Primitive Notions of Things, which the mind with a too facile and ſupine attractive faculty receives in, treaſures up and accumulates, from which all the reſt are derived, are unſound, confuſed, and raſhly abſtracted from things. The like luxuriant vanity and inconſtancy there is in the ſecond and ſequent Notions; whence it comes to paſs, that all that humane Reaſon which we employ, as touching the Inquiſition of things, is not well digeſted and built; but like ſome magnificent Pile without foundation. For whilſt men admire and celebrate the counterfeit forces of the mind; her true powers which might be raiſed (were right directions adminiſtred, and ſhe taught to become obſequious to things, and not impotently to inſult over them) they paſs by and loſe. This one way remaineth that the buſineſs be wholly*

reattemped with better preparations; and that there be throughout, An Inſtauration of Sciences and Arts, *and of all Humane Learning rais'd from ſolid foundations. And this, though it may ſeem in a ſort an infinite enterprize, and above mortal abilities, yet the ſame will be found more ſound and adviſed, than thoſe performances which hitherto have been atchieved: for in this there is ſome iſſue; but in the endeavours now undertaken about Sciences, a perpetual Wheeling, Agitation and Circle. Neither is he ignorant how unfrequented this* Experience *is, how difficil and incredible to perſwade a belief; yet he thought not to deſert the deſign, nor himſelf, but to try and ſet upon the way, which alone is pervious and penetrable to the mind of Man. For it is better to give a beginning to a thing which may once come to an end, than with an eternal contention and ſtudy to be enwrapt in thoſe mazes which are endleſs. And the ways of Contemplation for the moſt part reſemble thoſe celebrated ways of Action; the one, at the firſt entrance hard and difficult, ends in an open plain; the other at firſt ſight ready and eaſie, leads into by-ways and down-falls: And being he was uncertain when ſuch conſiderations ſhould hereafter come into any man's mind, induced eſpecially from this argument, that there hath none hitherto appear'd, who hath applied his mind to ſuch cogitations, he reſolv'd to publiſh, ſeparately, the* Firſt parts *as they could be perfected. Neither is this an ambitious but ſollicitous feſtination; that if in the mean ſpace he ſhould depart this mortal ſtation; there might yet remain a deſignation and deſtination of the thing he comprehended in his mind; and withall ſome Demonſtration of his ſincere and propenſe affection to promote the good of Mankind. Truly he eſteemed other ambition whatſoever, inferior to the buſineſs he had in hand: For either the matter in conſultation, and thus far proſecuted, is nothing; or ſo much as the conſcience of the merit it ſelf, ought to give him contentment without ſeeking a recompence from abroad.*

THE

FRANCIS Lord *VERULAM*

His great Inſtauration.

The PREFACE.

Of the State of Learning, *that it is not* Proſperous, *nor greatly* Advanced; *and that a far different way, than hath been known to former Ages, muſt be opened, to man's Underſtanding; and other Aids procured; that the* Mind *may practice her own power the* nature of things.

IT ſeems to me, that men neither underſtand the Eſtate they poſſeſs, nor their Abilities to purchaſe: but of the one to preſume more; of the other, leſs, than indeed they ſhould. So it comes to paſs, that over-prizing the Arts received, they make no farther Inquiry; or undervaluing themſelves, more than in equity they ought, they expend their Abilities upon matters of ſlight conſequence, never once making experiment of thoſe things which conduce to the ſumm of the buſineſs. Wherefore, *Sciences alſo have*, as it were, *their Fatal Columns*; being men are not excited, either out of Deſire or Hope, to penetrate farther. And ſeeing *the Opinion of Wealth is one of the cheif cauſes of Want*; and that out of a confidence of what we poſſeſs in preſent, true aſſiſtances are deſpiſed for the future, it is expedient, nay, altogether neceſſary, that the exceſſive Reverence and Admiration conceived of thoſe *Sciences*, which hitherto have been found out, ſhould in the Front and Entrance of this work, (and that roundly and undiſſemblingly) by ſome wholſome premonition, be taken off, leſt their Copy and Utility be too much Magnified and Celebrated. For he that

ſurveys with diligence all the variety of Books, wherein *Arts* and *Sciences* triumph, ſhall every where find infinite repetitions of the ſame matter, for manner of Delivery divers, but for Invention ſtale and preoccupate; ſo as what at firſt view ſeem'd numerous, after examination taken, are found much abated. § As for profit, I may confidently avouch it, That the wiſdom we have extracted, chiefly from the Grecians, ſeems to be a Child-hood of Knowledge, and to participate that which is proper to children, namely, *that it is apt for talk; but impotent and immature for propagation:* for it is of Controverſies rank and fertile, but of works barren and fruitleſs. So that the Fable and Fiction of *Scylla*, ſeems to be a lively Image of the *State of Learning*, as now it is, which for the upper parts had the face and countenance of a comely Virgin; but was from the womb downward circled and enwrapt with *barking Monſters*. So the *Sciences* wherein we are trained up, contain in them certain Generalities ſpecious and plauſible, but when you deſcend unto particulars, as to the Parts of Generation, expecting ſolid effects, and ſubſtantial operations, then, Contentions and Barking Altercations ariſe, wherein they cloſe, and which ſupply the place of a fruitful womb. § Again, if theſe kinds of Sciences were not altogether a mere liveleſs Thing, methinks it ſhould not have faln out, which now for many Ages hath continued, that *they* ſhould thus ſtand at a ſtay, in a manner immoveable in their firſt Footings, without any *Augmentation* worthy the Race of Mankind, in ſuch a dull Improficience, that not only Aſſertion remains Aſſertion, but Queſtion reſts ſtill Queſtion, which by Diſputes is not determined, but fixt and cheriſht: and all Tradition and Succeſſion of Diſcipline delivered from hand to hand, preſents and exhibits the Perſon of Teacher and Scholar, not of inventor, or of one ſhould add ſomething of note to what is invented. § But in Arts Mechachanical we ſee the contrary hath come to paſs, which as if they were inſpired by the Vital breath and prolifick influence of a thriving Air, are daily *Propagated* and *Perfected*; and which in their firſt Authors appear'd, for the moſt part rude and even burthenſome and Formleſs, have afterward

afterward acquir'd new-refin'd vertues, and a certain apt Propriety and uſeful Accommodation, ſo infinitely fruitful, that ſooner may mens ſtudies and deſires languiſh and change, than theſe *Sciences* arive at their full height and perfection. § Contrariwiſe *Philoſophy*, and *Sciences Intellectual*, like *States* are ador'd and celebrated, but nothing *Advanc'd*; nay, commonly of moſt vigor in their firſt Author, and by Time Degenerate and become embaſed. For ſince the time men became *devoted*, and as (*Pedary Senators*) reſigned over to the Placits and Definitions of one, they do not add any *Amplitude to Sciences*, but are wholly taken up in a ſervile duty of *Poliſhing or Protecting* certain Authors. § And let no man here alleage, that *Sciences* growing up by degrees, have at length arrived to a juſt period or perfect Stature, and ſo (as haveing filled up the juſt ſpaces of *Augmentation*) have ſetled and fixt themſelves in the works of ſome few Authors; and now that nothing more accompliſht can be found out, there remains no more to do, but that the *Sciences* already extant be improved, and adorned. Indeed it could be wiſht that the *ſtate of Learning were thus proſperous*; but the very truth is, theſe mancipations and ſervile reſignations of *Sciences*, is nothing elſe but a peccant humour, bred out of daring luſt and confidence in ſome few, and a languiſhing ſloth and Puſillanimity in the reſt. For when *Sciences* (for ſome parts it may be) have been tilled and laboured with diligence, then perchance hath there riſen up ſome bold-undertaking wit, for Compendious brevity of Method popular and plauſible, who in ſhew hath conſtituted a *Science*, but indeed depraved the *Labours of the Ancients*: Yet theſe Abridgments find acceptation with Poſterity, for the expedite uſe of ſuch a work, and to avoid the trouble and impatience of a new *Inquiry*. § And if any ſtand upon *Conſent now inveterate*, as the Judgement and teſt of Time, let him know he builds upon a very deceivable and infirm Foundation. Nor is it, for the moſt part, ſo revealed unto us, what in *Arts* and *Sciences* hath been diſcovered and brought to light in divers ages, and different Regions of the World; much leſs what hath been experimented, and ſeriouſly laboured by particular

Perſons

Perſons in private; *For neither the Births, nor the Abortions of Time have been Regiſtred.* § Nor is Conſent it ſelf, nor the long continuation thereof, with ſuch reverence to be adored: for however there may be many kinds of *States* in *Civil Government*; *yet the State of Sciences is but one*, which always was, and ſo will continue, *Popular*; and with the People the Diſciplines moſt in requeſt are either *Pugnacious* and *Polemical*; or *Specious* and *Frivolous*; namely ſuch as either *illaqueate* or *allure* the *aſſent.* Wherefore without queſtion, the greateſt Wits in every age have been over-born, and in a ſort tyrannized over, whilſt men of Capacity and Comprehenſion above the vulgar, (yet conſulting their own Credit and Reputation) have ſubmitted themſelves to the over-ſwaying Judgement of *Time* and *Multitude.* Therefore if in any *Time* or *Place*, more profound Contemplations have perchance emerged and revealed themſelves, they have been forthwith toſt and extinguiſht by the Winds and Tempeſts of *Popular opinions*: ſo that *Time like a River carries down to us that which is light and blown up; but ſinks and drowns that which is weighty and ſolid.* § Nay, the very ſame Authors, who have uſurpt a kind of *Dictature in Sciences*, and with ſuch confidence paſt cenſure upon matters in doubt, have yet (the heat once over) in the *Intervals*, from theſe peremptory fits of Aſſeveration, changed their note, and betaken themſelves to complaints, upon the *ſubtilty of Nature*, the *ſecret Receſſes of Truth*, the *Obſcurity of Things*, the *Implication of Cauſes*, the *Infirmity of Mans Diſcerning Power*: Yet nothing the more modeſt for all this, ſeeing they chuſe rather to charge the Fault upon the *common condition of Man and Nature*, than to acknowledge any Perſonal deficience in themſelves. Yea, it is a thing uſual with them, that what they cannot compaſs by *Art*, their way applied, to conclude the ſame impoſſible to be attained by the ſame *Art*: and yet for all this, *Art* muſt not be condemned, being ſhe is to examine and judge; wherefore the aim and intention of ſuch accuſations is only this, *That Ignorance may be delivered from Ignominy.* § So likewiſe what is already commended unto us, and entertained hitherto, is for moſt part ſuch a kind of *Knowledge*, as is

full

full of Words and Queſtions; but barren of Works and real Improvements; for *Augmentation* backward and heartleſs; pretending perfection in the whole, but ill-filled up in the Parts; for choice Popular, and of the Authors themſelves ſuſpected, and therefore fortified and countenanced by artificious evaſions. § And the Perſons who have entertained a deſign to make trial themſelves, and to give ſome *Advancement* to *Sciences*, and to *Propagate their bounds*, even theſe Authors durſt not make an open departure from the Common received Opinions; nor viſit the Head-ſprings of Nature, but take themſelves to have done a great matter, and to have gained much upon the Age, if they may but *interlace*, or *annex* any thing of their own; providently conſidering with themſelves, that by theſe middle courſes, they may both conſerve the *modeſty of Aſſenting*; and the *liberty of Adding*. But whilſt they thus cautiouſly conform themſelves to Opinions and Cuſtoms, theſe *Plauſible moderations*, redound to the great prejudice and detriment of Learning; For *at once to Admire and go beyond Authors, are habits ſeldom compatible: but it comes to paſs here after the manner of Waters, which will not aſcend higher than the level of the firſt Spring-head, from whence they deſcend*; wherefore ſuch writers amend many things, but promote little or nothing, making a Proficience in *Melioration*, not in *Augmentation*. § Neither hath there been wanting *undertaking Spirits*, who with a more reſolute confidence, preſuming nothing yet done, take themſelves to be the men, muſt rectifie All; and imploying the ſtrength of their wits in crying down, and reverſing all former judgements, have made paſſage to themſelves, and their own *Placits*; whoſe buſie Clamor, hath not much advanced *Knowledge*, ſince their aim and intention hath been, not to enlarge the *bounds of Philoſophy* and *Arts*, by a *ſincere* and *ſolid Enquiry*; but only to change the *Placits*, and tranſlate the Empire of *Opinions*, and ſettle it upon themſelves, with little advantage to *Learning*; *ſeeing amongſt oppoſite Errors, the Cauſes of Erring are commonly the ſame*. § And if any inconcerned natures, not mancipate to others, or their own opinions, but affecting liberty, have been ſo far animated, as to

deſire

desire that others together with themselves, would make farther *Inquiry*; these surely have meant well, but performed little, for they seem to have proceeded upon probable grounds only, being wheeled about in a vertiginous maze of Arguments, and by a promiscuous *license of Inquiry*, have indeed loosned the sinews of *severe Inquisition*: nor hath any of all these with a just patience, and sufficient expectance attended the *Operations of Nature*, and the *successes of Experience*. § Some again have embarqu'd themselves in the *Sea of Experiments*, and become almost Mechanical; but in the *Experience* it self, they have practised a roving manner of *Inquiry*, which they do not in a regular course constantly pursue. § Nay, many propound to themselves, certain petty Tasks, taking themselves to have accomplisht a great performance, if they can but extract some one Invention by a manage as poor as impertinent; for none rightly and successfully search the nature of any thing to the life in the Thing it self; but after a painful and diligent variation of Experiments, not breaking off there, proceeds on, finding still emergent matter of farther *Discovery*. § And it is an Error of special note, that the industry bestowed in Experiments, hath presently, upon the first access into the Business, by a too forward and unseasonable Desire, seised upon some design'd operation; I mean sought after, *Fructifera non Lucifera*, *Experiments of Use and not Experiments of Light and Discovery*: not imitating the divine method which created the first day *Light* only, and allowed it one entire Day, producing *no Materiate work the same day*, but descended to their Creation the days following. § As for those who have given the preeminence unto *Logick*, and are of opinion that the surest Guards for *Sciences* must be procur'd from *thence*; they have truly and wisely discerned, that the mind of man, and Intellective Faculty left unto it self, may deservedly be suspected. But the remedy is too weak for the disease, and is it self not exempt from Distemperature; for the *Logick* in force, though it may be rightly accommodated unto *Matters Civil and Popular Sciences*, which consist in *Discourse* and *Opinion*; yet it comes far short of penetrating the *subtilty of Nature*;

and

and undertaking more than it can maſter, *ſeems rather to eſtabliſh and fix Errors than to open a way to Truth.* § Wherefore to recollect what hath been ſaid, it ſeems that neither *Information from others*, *nor mens Inquiries* touching *Sciences*, have hitherto ſucceſsfully ſhined forth, eſpecially ſeeing there is ſo little *certainty in Demonſtration* and *Infallibility* of Experiments thus far diſcovered. And the Fabrick of the Univerſe to the contemplative eye of the Mind, for the frame thereof, is like ſome Labyrinth or intricate Maze, where ſo many doubtful paſſages; ſuch deceiveable reſemblances, of Things and Signs; ſuch oblique and ſerpentine windings, and intricate knots of Nature every where preſent themſelves, as confounds the underſtanding. And withall, we muſt continually make our way, through the woods of Experiences, and particular Natures, by the incertain Light of Senſe, ſometimes ſhining, ſometimes ſhadowed: yea, and the guides, which (as hath been toucht) offer their aſſiſtance, they likewiſe are entangled, and help to make up the number of Errors, and of thoſe that Err. In matters of ſuch perplext difficulty, there is no relying upon *the Judgement of men* from their own abilities; or upon the *Caſual Felicity of Particular events*; for neither the *capacity of Man*, how excellent ſoever; nor the *chance of Experience*, never ſo often iterated and eſſayed, is of force to conquer theſe Myſteries: we muſt march by line and level, and all the way, even from the firſt perception of Senſes, muſt be ſecured, and fortified by a certain Rule, and conſtant Method of proceeding. § Yet are not theſe things ſo to be underſtood, as if, in ſo many Ages, and ſo much Induſtry, nothing at all hath been performed to purpoſe; nor is their any cauſe why it ſhould repent us of the *Diſcoveries* already made; for certainly the Ancients, in thoſe ſpeculations which conſiſt in ſtrength of Wit, and abſtract Meditation, have approved themſelves men of admirable comprehenſions: But as in the *Art of Navigation*, the men of former Ages, directing their courſe by obſervation of Stars only, could edge along the coaſt of the known Continent, and it may be, croſs ſome narrow Seas or the

Mediterranean; but before the Ocean could be thus commanded, and the Regions of the new world discovered, it was requisite that the use of the *Mariners Needle*, as a more sure and certain guide should be first found out; even so what discoveries soever have been hitherto made in *Arts* and *Sciences*, they are of that quality, as might have been brought to light by Practice, Meditation, Observation and Discourse, as things nearer the senses, and for most part, under the command of common Notions; but before we can make our approaches, to the remote and hidden secrets of Nature, it is necessarily requisite, that a better and more perfect use, and practick-operation of the Mind and Understanding Faculty be introduc'd. § As for us, surely we,(vanquish'd with an immortal love of Truth) have expos'd our selves to doubtful,difficult and desert Paths; and by the protection and assistance of the Divine Power, have born up and encouraged our selves against the violent Assaults and prepared Armies, as it were, of Opinions, and against our own private and inward hesitations and scruples, and against the clouds and darkness of Nature, and every where flying fancies; that so we might procure the present and future Age more safe and sound Indications and Impressions of Truth. If in this high and arduous attempt, we have made any *Proficience*, surely by no other means have we cleared our selves a way, than by a sincere and just *humiliation of the spirit of Man, to the laws and operations of Nature.* For all they that went before us, who applied themselves to the finding out of *Arts*, casting a transient eye upon Things, Examples, and Experience, have presently (as if Invention were nothing else but a meer Agitation of Brain) invoked in a manner their own spirits, to divine, and utter Oracles unto them: but we being chastely and perpetually conversant with the operations of Nature, divorce not the Intellect from the Object farther than that the Images and Beams of things (as in sense)may meet and concentrate; by which manner of proceeding, there is not much left to the strength and excellency of Wit. The same submission of spirit we have practised in discovery, we have followed in delivery:

Nor

Nor have we endeavourd to ſet off our ſelves with Glory, or draw a Majeſty upon our Inventions, either by Triumphs of Confutations, or Depoſitions of Antiquity; or an uſurpation of Authority; or the vail of Obſcurity; which are Arts he may eaſily find out, whoſe ſtudy is not ſo much the Profit of others, as Applauſe to himſelf. I ſay we neither have practiſed, nor go we about, by force or fraud to circumvent mens Judgements, but conduct them to the things themſelves, and to the league and confederacy of things, that they may ſee what they have, what they reprehend, what they add and contribute to the Publick. And if we have been too credulous, or too dormant,& not ſo intentive upon the matter,or languiſht in the way, or broken off the thread of the *Inquiry*, yet notwithſtanding we preſent things after ſuch a manner open and naked, that our Errors may be detected and ſeparated before they can ſpread themſelves, or inſinuate their contagion into the maſs of Sciences; and after ſuch a Method as the continuation of our labours, is a matter facile and expedite. By this means we preſume we have eſtabliſht for ever, *a true and legitimate Marriage, between the Empirical and Rational faculty*; whoſe faſtidious and unfortunate Divorce and Separation, hath troubled and diſordered the whole Race and Generation of Man-kind. § And ſeeing theſe performances are not within the compaſs of our meer natural Power and command,we do here, in the Acceſs to this work, *Pour forth humbleſt and moſt ardent ſupplications to God the Father, God the Word, God the Spirit, that they being mindful of the Miſeries of Mankind, and of the Pilgrimage of this life, wherein we wear out few and evil days, they would vouchſafe to endow Mankind, by my hand, with new Donatives. And moreover, we humbly pray, that Humane knowledges, may no way impeach, or prejudice Divine Truths; nor that from the diſcloſing of the ways of ſenſe, and the letting in of a more plentiful Natural Light, any miſts of Incredulity or clouds of Darkneſs ariſe in our minds, touching Divine Myſteries; but rather that from a purified Intellect, purged from Fancies and Vanity; and yet yielded and abſolutely rendred*

up to Divine Oracles; the Tributes of Faith may be rendred to Faith. In the laſt place, that the venome of knowledge infuſed by the Serpent, whereby the mind of man is ſwelled and blown up, being voided; we may not be too aſpiringly wiſe, or above ſobriety, but that we may improve and propagate Verity in Charity. § Now we have performed our vows to heaven, converting our ſelves to men, we admoniſh them ſomethings that are Profitable, and requeſt of them ſome things that are equal. Firſt we admoniſh (which thing we have alſo prayed for,) that we keep humane Reaſon within due Limits in matters Divine,
Philo.Jud. and Senſe within compaſs: *For ſenſe like the Sun, opens and reveals the face of the Terreſtial Globe, but ſhuts up and conceals the face of the Celeſtial.* Again, that men beware that in flight from this error, they fall not upon a contrary extreme, *of too much abaſing Natural Power*; which certainly will come to paſs, if they once entertain a conceit, *that there are ſome ſecrets of Nature ſeperate and exempt, as it were by injunction, from Humane Inquiſition.* For it was not that *pure and immaculate Natural Knowledge, by the light whereof* Adam *gave names unto the Creatures, according to the propriety of their Natures, which gave the firſt motion and occaſion to the Fall; but it was that proud and Imperative Appetite of Moral Knowledge, defining the laws and limits of Good and Evil, with an intent in man to revolt from God, and to give laws unto himſelf, which was indeed the project of the Primitive Temptation.* For, of the knowledges which contemplate the works of Nature, the
Prov. 25. holy Philoſopher hath ſaid expreſly; *That the glory of God is to conceal a thing, but the glory of the King is to find it out:* as if the Divine Nature, according to the innocent and ſweet play of Children, which hide themſelves to the end they may be found, took delight to hide his works, to the end they might be found out; and of his indulgence and goodneſs to mankind, had choſen the ſoul of man to be his Play-fellow in this game. § In ſumm, I would adviſe all in general, that they would take into ſerious conſideration the true and Genuine ends of *knowledge*; that they ſeek it not either for Pleaſure, or Contention, or Contempt

tempt of others, or for Profit, or Fame, or for Honour and Promotion; or such like adulterate or inferior ends: but for the merit and emolument of Life, and that they regulate and perfect the same in charity: *For the desire of Power, was the fall of Angels; the desire of Knowledge, the fall of Man; but in charity there is no excess, neither Men nor Angels ever incurred danger by it.* § The Requests we make are these; (To say nothing of our selves touching the matter in hand) we *Request* thus much, *That men would not think of it as an opinion; but as a work, and take it for Truth, that our aim, and ends is not to lay the foundation of a Sect or Placit, but of Humane Profit and Proficience.* § Again, that respecting their own Benefit, and putting off Partialities and Prejudices, they would all contribute in one for the publick Good: and that being freed and fortified by our Preparations and Aids, against the Errors and Impediments of the ways, they likewise may come in, and bear a part in the burden, and inherit a portion of the Labours that yet remain behind. § Moreover that they chear up themselves, and conceive well of the enterprise; and not figure unto themselves a conceit and fancy, *that this Our Instauration is a matter infinite, and beyond the power and compass of Mortality*; seeing it is in truth the right and legitimate end and period of *Infinite Errors*; and not unmindful of Mortality, and Humane Condition, being it doth not promise that the *Design* may be accomplisht within the Revolution of an Age only, but delivers it over to Posterity to Perfect. In a word, *it seeks not Sciences arrogantly in the cells of man's wit, but submissively in the greater world: And commonly, Empty things are vast and boundless, but Solids are contracted and determined within a narrow compass.* § To conclude, we thought good to make it our last suit, (lest peradventure through the difficulty of the Attempt, any should become unequal Judges of our Labours) that men see to it, how they do, from that which we must of necessity lay down as a ground (if we will be true to our own ends) assume a liberty to censure, and pass sentence upon our labours; seeing we reject all this *premature and Anticipated humane*

mane Reaſon, raſhly and too ſuddenly departed from *Things*, (as touching the *Inquiſition of Nature*) as a thing various, diſordered and ill-built: Neither in equity can it be required of us, *to ſtand to the Judgement of that* Reaſon, *which ſtands it ſelf, at the Bar of Judicature.*

The

The Distribution of the Work into Six Parts.

P. I. PARTITIONES SCIENTIARUM, Or *a summary Survey and* partition *of* Sciences.

P. II. NOVUM ORGANUM, OR *True Directions for the Interpretation of Nature.*

P. III. PHÆNOMENA UNIVERSI, OR *History Natural and Experimental, for the building up Philosophy.*

P. IV. SCALA INTELLECTUS, OR *the Intellectual Sphere rectified to the Globe of the World.*

P. V. PRODROMI, Or *The Anticipations of* second Philosophy *emergent upon Practice.*

P. VI. SECUNDA PHILOSOPHIA, OR *Active Philosophy, from intimate Converse with Nature.*

The ARGUMENT of the several PARTS.

IT is one point of the Design we have in hand, *That every thing be delivered with all possible Plainness and Perspicuity: for the nakedness of the Mind, as once of the Body, is the companion of Innocence and Simplicity.* First therefore, *the order and Distribution of the work*, with the reason thereof, must be made manifest. The *Parts of the Work* are, by us assigned, *Six.*

¶ *The First Part exhibits the summ or universal de-* P. I.
scription of that Learning and Knowledges in the possessi-
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on whereof, men have hitherto been eſtated. For we thought good to make ſome ſtay even upon *Sciences received*, and that, for this conſideration; that we might give more advantage to the *Perfection of ancient knowledges, and to the introduction of new:* For we are carried, in ſome degree, with an equal temper of Deſire, *both to improve the labours of the Ancients, and to make farther progreſs.* And this makes for the faith and ſincerity of
Prov. 18. our meaning, according to that of the wiſe, *The unlearned Man receives not the words of knowledge, unleſs you firſt interpret unto him the conceptions of his heart:* Wherefore we will not neglect to ſide along (as it were in paſſage) the Coaſts of *accepted Sciences and Arts*; and to import thither, ſomethings uſeful and profitable. § Nevertheleſs we adjoyn *ſuch Partitions of Sciences, as comprehend, not only ſuch things that are found out and obſerved already, but ſuch alſo as are thereto pertaining, and have been hitherto pretermiſs'd.* For their are found *in the Intellectual Globe, as in the Terreſtial, ſoyls improved and Deſerts.* Wherefore let it not ſeem ſtrange, if now and then we make a departure from the *uſual Diviſions*, and forſake the beaten path of ſome Partitions: *for Addition whilſt it varies the whole, of neceſſity varies the Parts and the Sections thereof*; and the *accepted Diviſions*, are accommodated only to the *accepted ſumm of Sciences*, as it is now caſt up. § Concerning thoſe *Parts*, which we ſhall note as *Pretermitted*, we will ſo regulate our ſelves, as to ſet down more than the naked Titles, or brief Arguments of *Deficients.* For where we deliver up any thing as a *Deſiderate*, ſo it be a matter of merit; and the reaſon thereof may ſeem ſomewhat obſcure; ſo as, upon good conſideration, we may doubt, that we ſhall not be ſo eaſily conceived what we intend, or what the contemplation is we comprehend in our mind, and in our mediation, there it ſhall ever be our preciſe care, to annex either *precepts*, for the performing of ſuch a Work; or a Part of the Work it ſelf, performed by us already, for *Example* to the whole: that ſo we may in every Particular, either by *Operation or Information*, promote the buſineſs. For in my judgement, it is a matter which concerns not only the benefit of others, but

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our own Reputation alſo, that no man imagine that we have projected in our minds ſome ſlight ſuperficial notion of theſe *Deſigns*; and that they are of the nature of thoſe things, which we could *Deſire*, and which we accept only as *good wiſhes*. For they are ſuch as without queſtion, are within the power and poſſibility of men to compaſs, unleſs they be wanting to themſelves; and hereof, we for our parts, have certain and evident demonſtration; *for we come not hither, as Augures; to meaſure Countries in our mind, for Divination; but as Captains, to invade them, for a conqueſt. And this is the Firſt Part of our Works.*

¶ Thus having paſſed over Ancient Sciences, in the next place we enable humane Intellect to ſail through. *Wherefore to the Second Part is deſigned the Doctrine touching more ſound, and perfect uſe of Reaſon, in the inquiry of Things, and the true aſſiſtances of the underſtanding*; that hereby (ſo far as the condition of humanity and mortality will ſuffer) the Intellect, may be elevated; and amplified with a faculty, capable to conquer the dark, and deeper ſecrets of Nature. And the *Art*, we here ſet down, which we are wont to call, The *Interpretation of Nature*, is a kind of *Logick*, though very much, and exceeding different. That *vulgar Logick* profeſſes the Preparation and Contrivance of aids and forces for the underſtanding, herein they conſpire, but it clearly differs from the Popular, ſpecially in three things, namely, *in the end, in the order of Demonſtrating, and, in the firſt diſcloſures to Inquiry.* § For *the End* propounded in this our Science is, that there may be found out not Arguments, but Arts; not things Conſentaneous to Principles, but even Principles themſelves; not probable reaſons, but deſignations and indications of works; wherefore from a different intention follows a different effect: for there, an Adverſary is diſtreſſed and vanquiſht by Diſputation, here by nature, the thing done. § *And with this End accords the nature and order of their Demonſtrations*: For in *vulgar Logick*, almoſt all the pains is imployed about *Syllogiſm*: as for *Induction*, the *Dialecticks* ſeem ſcarce ever to have taken it into any ſerious conſideration, ſlightly paſſing it over P. II.

and haſtning to the forms of Diſputing. But we reject *Demonſtration by Syllogiſm*, for that it proceeds confuſedly; and lets Nature eſcape our hands. For though no man call into doubt, but that *what are coincident in a middle term are in themſelves coincident*, (which is a kind of Mathematick Certitude) yet here lies the Fallax, *that Syllogiſm conſiſts of Propoſitions, Propoſitions of words, and words are the tokens and marks of things.* Now if theſe ſame *notions* of the mind, (which are, as it were, *the ſoul of words*, and the Baſis of this manner of Structure and Fabrick) be rudely and raſhly divorc'd from things, and roving; not perfectly defin'd and limited, and alſo many other ways vicious; all falls to ruine. Wherefore we reject *Syllogiſm*, not only in regard of *Principles* (for which nor do they make uſe of it) but in reſpect alſo of *Middle Propoſitions*, which indeed *Syllogiſm*, however, infers and brings forth; but barren of operations and remote from practice; and in relation to the Active Part of Sciences, altogether incompetent. Although therefore we may leave to *Syllogiſm*, and ſuch celebrated and applauded *Demonſtrations*, a juriſdiction over Arts Popular and Opinable (for in this kind we move nothing) yet for the nature of things, we every where, as well in *Minor as Major Propoſitions*, make uſe of *Inductions:* for we take *Induction* to be that form of *Demonſtration*, which ſupports ſenſe; preſſes Nature, and is inſtanced in Works, and in a ſort mingled therewith. Wherefore the order alſo of *Demonſtration* is altogether inverted. For hitherto the buſineſs uſed to be thus managed; from ſenſe, and ſome few Particulars, ſuddenly to fly up to the higheſt Generals, as to fixt Poles, about which Diſputations may be turned; from which the reſt of intermediate Axioms may be derived. A way compendious indeed, but precipitate; and to Nature impervious; but for Diſputations ready, and accommodate. But according to *our Method*, *Axioms* are raiſed by a ſequent continuity and graduat dependancy, ſo as there is no reſting upon the higheſt Generals, but in the laſt place; and thoſe higheſt Generals in quality not notionals; but well terminated, and ſuch as Nature acknowledges to be truly near allied unto her; and which

cleave

cleave to the individual intrinſicks of things. § *But touching the form it ſelf of Induction and Judgement made by it*, we undertake a mighty work. For the *Form, whereof Logicians ſpeak, which proceeds by ſimple enumeration, is a childiſh thing*, and concludes upon admittance; is expoſed to peril from a contradictory inſtance; looks only upon common operations; and is in the iſſue endleſs. But to the knowledges of *Induction*, ſuch a *Form* is required, as may ſolve and ſeparate *experience*; and by due excluſion and rejection neceſſarily conclude. And if that publick and popular *Judgement of Dialecticks*, be ſo laborious, and hath exerciſed ſo many and ſo great Wits; how much greater pains ought we to take in this other; which not only out of the ſecret cloſets of the mind, but out of the very entrails of Nature is extracted? Nor is this all; for we more firmly ſettle, and ſolidate the foundation of Sciences, and take the firſt riſe of our inquiry deeper than hitherto hath been attempted; ſubmitting to examinations thoſe Principles, which *vulgar Logick* takes up on the credit of another. For the *Dialecticks* borrow, as it were, from all other Sciences, the Principles of Sciences; again, adore the prime Notions of the mind: Laſtly, reſt ſatisfied with the immediate informations of ſenſe rightly diſpoſited. But our judgement is this, that true Logick ſhould viſit every particular Province of Sciences, with greater command than their principles poſſeſs; and that thoſe ſame *putative Principles* be enforc'd to give an account, and be liable to examination, until ſuch time as their validity and tenure clearly appeared. And as touching the *Prime Notions of the Intellect*, there is nothing of thoſe, (the underſtanding left at liberty to it ſelf) hath congeſted, but matter to be ſuſpected; nor any way warrantable, unleſs it be ſummon'd, and ſubmit it ſelf to a new Court of Judicature; and that ſentence paſs according thereto. Moreover we many ways ſift and ſound the information of ſenſe it ſelf; for the Senſes deceive, yet withall they indicate their Errors: but Errors are at hand, Indications to be ſought for a far off. § *The guilt of Senſe is of two ſorts, either it deſtitutes us, or elſe deceives us.* For firſt, there are many things which

eſcape the cognizance of ſenſe, even when it is well diſpoſed, and no way impedite: either by reaſon of the ſubtility of the entire body, or the minutneſs of the parts thereof, or the diſtance of place, or the ſlowneſs, and likewiſe ſwiftneſs of motion; or the familiar converſe with the object, or ſome other cauſes. Again, nor where ſenſe truly apprehends its object, are her Precepts ſo very firm: *for the teſtimony and information of ſenſe, is ever from the Analogy of Man, and not from the Analogy of the World*; and it is an error of dangerous conſequence to aſſert, *that ſenſe is the meaſure of things.* Wherefore to encounter theſe inconveniences, we have with painful and faithful ſervice every where ſought out, and collected aſſiſtances, *that Supplements to Deficients*; *to Variations, Rectifications, may be miniſtred.* Nor do we undertake this ſo *muchby inſtruments, as by experiments*; for the ſubtilty of *Experiments*, is far greater than of ſenſe it ſelf, though aſſiſted with exact inſtruments; we mean *ſuch experiments*, which to the intention of the thing inquired, are skilfully according to Art invented and accommodated. Wherefore we do not attribute much to the immediate and particular perception of ſenſe; but we bring the matter to this iſſue, that ſenſe may judge only of the experiment, the experiment of the thing. We conceive therefore, that of *ſenſe*, (from which all knowledge in things natural muſt be derived, unleſs we mean wilfully to go a witleſs way to work) we are become the religious Pontifs; and the not inexpert interpreters of her Oracles; ſo as others may ſeem in outward profeſſion; but we in deed and action, to protect and honour *ſenſe.* And of this kind are they which we prepare, for the light of Nature, the actuating, and immiſſion thereof, which of themſelves were ſufficient, were humane Intellect equal, and a ſmooth inanticipated Table. But when the minds of men are after ſuch ſtrange ways beſieged, that for to admit the true beams of things, a ſincere and poliſht Area is wanting; it concerns us, of neceſſity to bethink our ſelves of ſeeking out ſome remedy for this diſtemperature. The *Idolaes*, wherewith the mind is preoccupate are either *Attracted, or Innate*; Attracted have ſlid into mens minds, either

either by the *Placits and Sects of Philoſophers*; or by *depraved laws of Demonſtrations*. But the *Innate* inhere in the nature of the Intellect, which is found to be far more liable to error, than *ſenſe*. For however men may pleaſe themſelves, and be raviſht into admiration, and almoſt adoration of the mind of man, this is moſt certain: *as an inequal looking-glaſs*, changes the rays of objects, according to its own figure, and cutting; even ſo the mind, when it ſuffers impreſſion from things by ſenſe, in encogitating and diſcharging her notions, doth not ſo faithfully inſinuate and incorporate her nature, with the nature of things. And thoſe two firſt kinds of *Idolaes* can very hardly; but thoſe latter, by no means be extirpate. It remains only that they be diſcloſed; and that ſame treacherous faculty of the mind be noted and convinced; leſt from the unſound complection of the mind, upon the extermination of ancient, perchance new ſhoots of Errors ſpring in their place; and the buſineſs be brought only to this iſſue, that errors be not extinguiſht, but changed: but on the contrary, now at laſt, it be for ever decreed and ratified, *That the intellect cannot make a judgement but by induction*, and by *a legittimate form thereof*. Wherefore *the Doctrine of purifying the Underſtanding*, that it may become receptive of truth, is perfected by *three Reprehenſions*; *Reprehenſion of Philoſophy*; *Reprehenſion of Demonſtrations*; and *Reprehenſion of Native humane Reaſon*. Theſe explicated, and then the caſe cleared, what the nature of things, what the nature of the mind is capable off; we preſume (the Divine goodneſs being Preſident at the Rites) that we have prepared and adorned, *the Bride-chamber of the Mind and of the Univerſe*. Now may the vote of the Martiage-ſong be, *that from this conjunction, Humane Aids, and a Race of Inventions may be procreated, as may in ſome part vanquiſh and ſubdue mans miſeries and neceſſities*. And this is the ſecond Part of the Work.

¶ But our purpoſe is not only to point out and mu- P. III.
nite the way; but to enterpriſe it: *Wherefore the third Part of the Work compriſeth*, Phænomena Univerſi, as to ſay, *all kind of Experience*, *and Natural Hiſtory*, of ſuch

kind

kind as may be fundamental for the building up of *Natural Philoſophy*. For neither can any exact way of *Demonſtration or Form of interpreting Nature*, both guard and ſupport the mind from error and lapſe; and withal preſent and miniſter matter for knowledge. But they who propoſed to themſelves not to proceed by Conjectures and Divinations, but to find out, and to know, whoſe end and aim is not to contrive Fictions and Fables, but to ſearch with diligence into the nature of, and, as it is were, *anatomize this true world*; muſt derive all from the very things themſelves. Nor can the ſubſtitution and compenſation of Wit, or Meditation, or Argumentation ſuffice to this travail, inquiſition, and mundane perambulation; no not if all the Wits in the World ſhould meet together. Wherefore we muſt either take a right courſe, or deſert the buſineſs for ever: and to this day the matter hath been ſo managed, that it is no marvail, if nature hath not diſcloſed her ſelf. For firſt, defective and fallacious information of ſenſe; negligent, inequal, and as it were, caſual obſervation; vain Tradition, and from idle Report; Practice, intent on the Work, and Servile; *Experimental attempt*, ignorant, dull, wild, and broken: laſtly, ſlight and poor *Natural Hiſtory*; have towards the raiſing of Philoſophy, congeſted moſt depraved matter for the underſtanding. After this, prepoſterous ſubtilty of arguing, and ventilation, hath eſſayed a late remedy to things plainly deſperate; which doth not any way recover the buſineſs, or ſeparate errors. § *Wherefore there is no hope of greater advancement and progreſs, but in the Reſtauration of Sciences.* And the commencements hereto muſt, by all means, be derived from *Natural Hiſtory*; and that too, of a new kind and proviſion: for to no purpoſe you poliſh the Glaſs, if Images be wanting: not only faithful guards muſt be procured, but apt matter prepared. And this our *Hiſtory*, as our *Logick*, differs from that in uſe, in many particulars: *in the end or office, in the Maſs and Congeries; then in the ſubtilty, alſo in choice, and in conſtitution in reference to thoſe things that follow.* § *For firſt we propound ſuch a Natural Hiſtory*, as doth not ſo much either pleaſe for the variety of things, or profit for preſent improve-

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ment of Experiments, as it doth diſperſe a light to the invention of cauſes; and gives, as it were, the firſt Milk to the nouriſhing up of Philoſophy. For though we principally purſue operation, and the Active part of Sciences; yet we attend the due ſeaſon of Harveſt; nor go about to reap the green herb or the blade. For we know well that Axioms rightly invented, draw after them the whole troup of Operations; and not ſparſedly, but plenfully exhibit Works. But we utterly condemn and renounce, as *Atalantaes Apple* which retards the Race, that unſeaſonable and childiſh humour of accelerating early Pledges of new Works. And this is the Duty of our *Natural Hiſtory*. § *As for the Maſs, we compile* a Hiſtory, not only of Nature at Liberty, and in Courſe; I mean, when without compulſion ſhe glides gently along, and accompliſhes her own work: (as is the *Hiſtory of the Heavens, Meteors, Earth and Sea*; *of Minerals, Plants, Animals:*) but much rather of *Nature ſtraitned and vext*; when by the provocations of Art, and the miniſtry of Man, ſhe is put out of her common road; diſtreſſed and wrought. Wherefore, all the experiments of Arts Mechanical; all of the Operative part of Liberal; all of many Practical, not yet conſpired into a peculiar Art (ſo far as any diſcovery may be had, and ſo far as is conducent to our intention) we will ſet down at large. So likewiſe (not to diſſemble the matter) nothing regarding mens pride and bravades, we beſtow more pains, and place more aſſurance in this Part than in that other; being the nature of things, more diſcloſes her ſelf in *the vexation of Art*, than when it is at its own liberty. § Nor do we preſent the *Hiſtory of Subſtance only*, but alſo we have taken it as a part of our diligence, to prepare a ſeparate *Hiſtory of their vertues*, we mean, ſuch as in nature may be accounted Cardinal, and wherein the Primordials of Nature are expreſly conſtituted; as matter inveſted with her Primitive qualities and appetites; as *denſe, rare, hot, cold, conſiſtent, fluid, ponderous, light*, and others not a few. § For indeed, to ſpeak of *ſubtilty, we ſearch out with choice diligence, a kind of Experiments, far more ſubtile and ſimple than thoſe commonly met with.* For we educe and extract many out

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of darkneſs, which had never come into any mans mind to inveſtigate, ſave his who proceeds by a certain and conſtant path, to the invention of cauſes: whereas in themſelves they are of no great uſe; that it is clearly evident, that they were not ſought after, for themſelves, but that they have directly the ſame reference to things and works, that the Letters of the Alphabet have to ſpeech and words; which, though ſingle by themſelves, they are unprofitable, yet are they the Elements of all Language. § *And in the choice of Reports and Experiments, we preſume that we have given in better ſecurity, than they who hitherto have been converſant in Natural Philoſophy:* for we admit nothing but by oculate faith, at leſt evident proof; and that after moſt ſevere enquiry: ſo as nothing is reported hightned to the abuſive credit of a miracle; but what we relate are chaſte and immaculate from Fables and Vanity. So alſo all thoſe received and ventilated current fictions and lies, which by a ſtrange neglect, have for many ages been countenanced, and are become inveterate; we do by name proſcribe, and preciſely note, that they may be no longer prejudicial to Sciences. For what one wiſely obſerves, *That Fables, Superſtitions, and idle Stories, which Nurſes inſtill into young Children, do in good earneſt deprave their minds:* ſo the ſame reaſon moved us, to be ſo religious and careful, leſt at the entrance, where we handle and take the charge *of the Infancy, as it were, of Philoſophy, under natural Hiſtory*; ſhe ſhould be initiated in any vanity. § But *in every new and ſomewhat more ſubtile experiment*, in our opinion, certain and tryed, we yet apertly adjoyn the manner of the experiment we have practiſed, that after it is made apparent what the ſucceſs of every particular was with us; men might ſee the error which might lurk and cleave thereto; and be awaked to proofs, if any ſuch be, more exact and ſecure. § *In brief*, we every where ſparſedly inſert monitions and ſcruples and conjectures; ejecting and interdicting, as it were, by a ſacred adjuration, and exorciſm, all Phantaſms. § *Laſtly, being it is a thing moſt liquid unto us*, how exceedingly Experience and Hiſtory diſperſe the beams of the ſight of humane Intellect; and how hard a matter it is, ſpecially

Plut. de Ed. P. ex Plat. de Rep.

to

to minds tender and preoccupate, at firſt entrance, to become familiar with nature; we therefore many times add our own obſervations, as certain firſt converſions and inclinations, and as it were, *Aſpects of Hiſtory to Philoſophy*; to the end that they may be both pledges to men, that they ſhall not ever be detained in the waves of Hiſtory; as alſo that when they are once arrived to the operation of the underſtanding, all may be in a more preparedneſs. And by this kind of *Natural Hiſtory*, as here we deſcribe, we ſuppoſe that there may be a ſecure and eaſie acceſs unto Nature; and ſolid and prepared matter preſented unto the Underſtanding.

¶ *Now we have* both fortified and environed the underſtanding with faithful Auxiliaries and forces, and by a ſtrict Muſter raiſed a compleat Army of Divine Works, *there ſeems nothing remaining but that we ſet upon Philoſophy it ſelf.* But in ſo deficile and dubious an enterpriſe, there are ſome particulars, which ſeem neceſſarily to be interpoſed partly for inſtruction, partly for preſent uſe. § *Of theſe the firſt is, that the examples of Inquiſition, and of Invention*, he propounded according to our Rule and Method repreſented in particular Subjects; chiefly making choice of ſuch Subjects, which amongſt other things to be enquired, are the moſt noble, and in mutual relation, moſt adverſe; that there may not want an *example* in every kind. Nor do we ſpeak of thoſe *examples*, which for illuſtration ſake, are annexed to every particular Precept and Rule (for we have ſufficiently quit our ſelves hereof in the *Second Part of the Work*,) but we mean directly the Types and Platforms which may preſent, as it were, to the eye, the whole Procedure of the Mind, and the continued Fabrick and Order of Invention, in certain ſelected ſubjects; and they various and of remark. For it came into our mind, that in *Mathematicks*, the frame ſtanding, the Demonſtration inferred is facile and perſpicuous; on the contrary, without this accommodation and dependency, all ſeems involved, and more ſubtile than indeed they be. *Wherefore to examples of this ſort we aſſign the Fourth Part of our Work:* which indeed is nothing elſe, but a particular, and explicite application of the Second Part. P. IV.

P. V. ¶ *But the fifth Part* is added only for a time, and paid as intereſt until the Principal be raiſed. For we are not ſo precipitantly bent upon the end, as too ſlightly to paſs over what we caſually meet with by the way. Wherefore the *Fifth Part of the Work*, is compoſed of ſuch things as we have, or found out, or experimented, or ſuperadded; nor yet do we perform this, by the *reaſon and rules of Interpretation*, but by the ſame application of the underſtanding, which others in enquiry and invention uſe to practice. For ſeeing from our perpetual converſe with nature, we hope greater matters from our meditations, than we can promiſe to our ſelves from the ſtrength of our own wit; theſe obſervations may be as tents pitched in the way, into which the mind, in purſuit of more certain Collections, may turn in, and for a while repoſe her ſelf. Yet in the mean, we promiſe not to engage our ſelves upon the credit of thoſe Obſervations; becauſe they are not found out, nor tried by the right *form of Interpretation*. § And there is no cauſe why any ſhould diſtaſt or entertain a jealouſie, *at that ſuſpenſion of Judgement in knowledge, which aſſerts not abſolutely, that nothing can be known; but that nothing, without a certain Order, and a certain Method, can be known; and yet withal, lays down for uſe and eaſe, certain Degrees of certitude, until the mind be fixt upon the explication of cauſes.* For neither thoſe very Schools of Philoſophers, who down right maintained *Acatalepſie* or *Incomprehenſibility*, have been inferiour to thoſe, who uſurp *a liberty of pronouncing ſentence*: but they provided not aſſiſtances to the ſenſe and underſtanding, as we have done, but utterly took away all *credit* and *authority*, which is a far different caſe and almoſt oppoſite.

Academ. Vet. Nov.

Dogmat.

P. VI. ¶ *Now the ſixth Part of our Work, whereto the reſt are ſubſervient and miniſtrant, doth altogether diſcloſe, and propound that Philoſophy, which is educed, and conſtituted out of ſuch a legitimate ſincere and ſevere enquiry, as we have already taught and prepared.* But to conſummate and perfect this *laſt Part*, is a thing exalted above our ſtrength, and beyond our hopes. We have given it, as we truſt, not contemptible beginnings; the proſperous ſucceſs of mankind ſhall give it iſſue; and

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peradventure ſuch, as men, in this preſent ſtate of mind and imployments, can not eaſily conceive and comprehend. And the caſe concerns not contemplative felicity alone, but indeed mens affairs and fortunes, and all the power of Works: *For Man, Natures miniſter and interpreter, doth, and underſtands ſo much, as he hath by Operation or Contemplation obſerved of Natures Order; nor can know or do any more:* For neither can any forces unlooſe and break aſunder the chain of Cauſes; nor is nature otherwiſe, than by obedience unto it, vanquiſht. Wherefore theſe two main Intentions, *Humane Sciences, and Humane Potencies*, are indeed in the ſame point coincident: and the fruſtration of Works, for moſt part, falls out from the ignorance of Cauſes. § But herein the ſumm and perfection of all conſiſts, if a man, never taking off the eye of his mind from the things themſelves, throughly imprint their images to the life. For God defend, that we ſhould publiſh the ayery dreams of our own Fancy, for the real *Ideas of the World*! But rather may he be ſo graciouſly propitious unto us, that we may write the *Apocalypſe*, and true viſion of the impreſſions and ſignets of the Creator, upon the Creature!

Wherefore thou, O Father, who haſt conferred viſible Lights as the Primitiæ *on the Creature; and breathed into the face of Man Intellectual Light, as the accompliſhment of thy Works; protect and conduct this Work, which iſſuing from thy Goodneſs, returns to thy Glory! Thou, after thou hadſt ſurveyed the works thy hands had wrought, ſaw that all was exceeding Good, and haſt reſted: but Man ſurveying the works his hands had wrought, ſaw that all was vanity and vexation of Spirit, and found no Reſt: Wherefore if we labour with diligence, and vigilance in Thy works; thou wilt make us Participants of thy Viſion, and of thy Sabbath. We humbly ſupplicate, that we may be of this reſolution, and inſpired with this mind; and that thou wouldſt be pleaſed to endow humane Race, with new Donatives by our hands; and the hands of others, in whom thou ſhalt implant the ſame Spirit.*

THE

GENERAL ARGUMENT

Of the

Nine Books.

LIB. I. Is Proemial to the Inſtauration of Sciences. § Reports the DISCREDITS of LEARNING. § The DIGNITY of LEARNING.

LIB. II. Declares the ADVANCEMENT of LEARNING. § Inſtrumental. § Eſſential, in the Partition of Sciences, into HISTORY. § POESY. § PHILOS. § Partit. of HIST. § POESY.

LIB. III. Partitions of PHILOSOPHY, into § SUMMARY. § SPECIAL, into DIVINE. § NATURAL. § HUMANE. § Partitions of NATURAL PHILOSOPHY.

LIB. IV. Partitions of HUMANE PHILOSOPHY into § PHILOSOPHY of HUMANITY. § CIVIL. § Partitions of the PHILOSOPHY of HUMANITY.

LIB. V. Partitions of SCIENCES, from the Uſe and Objects of of the MIND, into § LOGICK, § ETHICK. § Of LOGICK into INVENTION. § JUDGEMENT. § MEMORY. § TRADITION.

LIB. VI. Partitions of TRADITION or ELOCUTION into the ORGAN of SPEECH. § METHOD of SPEECH. § ILLUSTRATION of SPEECH.

LIB. VII. Partitions of ETHICK or MORAL KNOWLEDGE, into the Doctrine of the PLATFORM of GOOD. § Of the CULTURE of the MIND.

LIB. VIII. Partitions of CIVIL KNOWLEDGE, into the Doctrine of CONVERSATION. § Of NEGOTIATION. § Of GOVERNMENT of STATES.

LIB. IX. Partitions of THEOLOGY omitted, DEFICIENTS Three. § I. THE RIGHT USE OF HUMANE REASON in DIVINITY. § II. The DEGREES OF UNITY IN THE CITY OF GOD. § III. The EMANATIONS OF SS. SCRIPTURE.

The

THE

ARGUMENT

OF THE

CHAPTERS

OF THE

First Book.

CAP. I.

THE Consecration of this Work unto the most Learned of Princes, King James. § *Who in high, but just conceptions is here admired.* § *The Distribution into the Dignity and Proficiency of Learning.* I. *Discredits of Learning from the objections of Divines;* *That the aspiring unto Knowledge was the first Sin.* *That Learning is infinite and full of anxiety.* *That Learning inclines the Mind to Heresie and Atheism.* II. *The Solution.* *Original Guilt was not in the Quantity, but in the Quality of Knowledge.* § *The Corrective hereof.* *Charity.* III. *Against Infinity, Anxiety, and Seducement of Knowledge, Three preservatives.* § *That it instruct us in our Mortality.* § *That it gives us content.* § *That it soar not too high.* § *And so Philosophy leads the Mind by the Links of Second Causes unto the First.*

CAP. II.

I. *Discredits cast upon Learning from the objections of Politicks;* *That Learning softens Mens natures, and makes them unfit for Exercise of Arms.*

Arms. That Learning perverts mens minds for matter of Government. Other particular indiſpoſitions pretended. II. *The ſolution; Learning makes not men unapt for Arms.* III. *Learning inables men for Civil Affairs.* IV. *Particular ſeducements imputed to Learning: As curious incertainty.* § *Pertinacious Regularity.* § *Miſleading Book-Preſidents.* § *Retired ſlothfulneſs.* § *Relaxation of Diſpline; are rather cured than cauſed by Learning.*

CAP. III.

I. *Diſcredits of Learning from Learned mens Fortunes; Manners; Nature of Studies.* II. *Derogations derived from Fortune are theſe; Scarcity of Means.* § *Privateneſs of Life.* § *Meanneſs of Imployment.* III. *From their Manners; theſe too Regular for the times.* § *Too ſenſible of the good of others; and too neglective of their own.* § *A defailance in applying themſelves to Perſons of Quality.* § *A Failing in ſome leſſer Ceremonies of demeanure.* § *Groſs Flattery practiſed by ſome Learned men.* § *Inſtanced, in the Modern Dedication of Books.* § *Diſcreet Morigeration allowed.*

CAP. IV.

I. *Diſtempers of Learning from Learned mens Studies, are of three ſorts; Phantaſtical Learning; Contentious Learning; Delicate Learning.* II. *Delicate Learning a curioſity in words, through profuſeneſs of ſpeech.* § *Decent expreſſion commended.* § *Affected brevity cenſured.* III. *Contentious Learning, a curioſity in matter, through Novelty of Terms or ſtrictneſs of Poſitions.* § *A vanity either in Matter; or in Method.* IV. *Phantaſtical Learning hath two branches, Impoſture; Credulity.* § *Credulity a Belief of Hiſtory; or a Belief of Art; or Opinion: and that either Real, in the Art it ſelf.* § *Or Perſonal in the Author of ſuch an Art or Science.*

CAP. V.

Peccant Humours in Learning. I. *Extreme affection to two extremes; Antiquity: Novelty.* II. *A diſtruſt that any thing New, ſhould now be found out.* III. *That of all Sects and Opinions, the beſt hath ſtill prevailed.* IV. *An over-early reduction of Knowledge into Arts and Methods.* V. *A neglect of* Primitive Philoſophy. VI. *A Divorce of the Intellect from the Object.* VII. *A contagion of Knowledge in General, from Particular inclinations and tempers.* VIII. *An impatience of ſuſpenſe; haſte to poſitive aſſertion.* IX. *A Magiſtral manner of Tradition of Knowledge.* X. *Aim of Writers, Illuſtration, not Propagation of Knowledge.* XI. *End of Studies, Curioſity, Pleaſure, Profit, Preferment,* &c.

CAP.

CAP. VI.

The Dignity of Learning from Divine Arguments and Teſtimonies. I. *From Gods Wiſdom.* § *Angels of Illumination.* § *The firſt Light.* § *The firſt Sabbath.* § *Mans imployment in the Garden.* § Abels *contemplation.* § *The Invention of Muſick.* § *Confuſion of Tongues.* II. *The excellent Learnings of* Moſes. § Job. § Solomon. § *Chriſt.* § *St.* Paul. § *The Ancient Doctors of the Church.* § *Learning exalts the Mind to the Celebration of Gods Glory; and is a preſervative againſt Error and Unbelief.*

CAP. VII.

The Dignity of Learning from humane Arguments and Teſtimonies. I. *Natural Inventors of new Arts, for the Commodity of Man's life, conſecrated as Gods.* II. *Political, Civil Eſtates and Affairs advanced by Learning.* § *The beſt and the happieſt times under Learned Princes and others.* § *Exemplified in ſix continued ſucceeding Emperours from the death of* Domitian. III. *Military: The Concurrence of Arms and Learning.* § *Exemplified in* Alexander *the Great.* § Julius Cæſar *the Dictator.* § Xenophon *the Philoſopher.*

CAP. VIII.

The Merit of Learning, from the influence it hath upon Moral vertues. § *Learning a Sovereign remedy for all the Diſeaſes of the Mind.* § *The dominion thereof greater than any Temporal Power, being a Power over Reaſon and Belief.* § *Learning gives Fortunes, Honours and Delights, excelling all other as the ſoul the ſenſe.* § *Durable monuments of Fame.* § *A proſpect of the Immortality of a future World.*

The ſecond BOOK.

THE PROEM.

THe *Advancement of Learning commended to the Care of Kings.* I. *The Acts thereof in general three, Reward, Direction, Aſſiſtance.* II. *In ſpecial, about three Objects, Places, Books, Perſons.* § *In Places four Circumſtances, Buildings, Revenues, Priviledges, Laws of Diſcipline.* § *In Books two, Libraries, good Editions.* § *In Perſons two, Readers of Sciences extant, Inquirers into Parts non-extant.* III. *Deficients in the Acts of Advancement, ſix, want of Foundations for Arts at large.* § *Meanneſs of Salary to Readers.* § *Want of allowance for experiments.* § *Prepoſterous Inſtitutions: unadviſed praſtiſes in Academical ſtudies.* § *Want of Intelligence between the Univerſities of* Europe. § *Want of Enquirers into the Defects of Arts.* § *The Authors particular deſign.* § *Modeſt defence.*

CAP. I.

I. *An Universal Partition of Humane Learning into,* § *History.* II. *Poesie.* III. *Philosophy.* § *This Partition is drawn from the three Intellective Faculties; Memory; Imagination; Reason.* § *The same distribution is agreeable unto Divine Learning.*

CAP. II.

I. *The Partition of History, into Natural and Civil. (Ecclesiastical, and Literary comprehended under Civil.)* II. *The Partition of Natural History, into the History of Generations.* III. *Of Preter-Generations.* IV. *Of Arts.*

CAP. III.

I. *A Second Partition of Natural History from the Use and End thereof, into Narrative, and Inductive. And that the most noble end of Natural History is, that it minister and conduce to the building up of Philosophy; which end, Inductive History respecteth.* II. *The Partition of the History of Generations, into the History of the Heavens; The History of the Meteors; The History of the Earth, and Sea; The History of Massive Bodies, or of the greater Collegiats; The History of Kinds, or of the lesser Collegiats.*

CAP. IV.

I. *The Partition of History Civil, into Ecclesiastical and Literary; and (which retains the general name) Civil.* II. *Literary* Deficient. § *Precepts how to compile it.*

CAP. V.

Of the Dignity and Difficulty of Civil History.

CAP. VI.

The first Partition of Civil History, into § *Memorials.* § *Antiquities.* § *Perfect History.*

CAP. VII.

The Partition of Perfect History, into Chronicles of Times; Lives of Persons; Relation of Acts. § *The explication of the History of Lives.* § *Of Relations.*

CAP. VIII.

The Partition of the History of Times; into universal and particular History. The advantages and disadvantages of both.

CAP. IX.

The Second Partition of the History of Times, into Annals, and Journals.

CAP. X.

A Second Partition of Special-Civil History into History Simple & Mixt.

CAP.

CAP. XI.

I. *The Partition of Eccleſiaſtical Hiſtory, into the General Hiſtory of the Church.* II. *Hiſtory of Propheſie.* III. *Hiſtory of Providence.*

CAP. XII.

The Appendices of Hiſtory Converſant about the words of Men, as Hiſtory it ſelf about Men's Acts. The Partition of them into Speeches; Letters, and Apothegms.

CAP. XIII.

The Second Principal part of Humane Learning, Poeſie. I. *The Partition of Poeſie into Narrative.* II. *Drammatical.* III. *Parabolical.* § *Three Examples of Parabolical Poeſie propounded.* IV. *Natural.* V *Political.* VI. *Moral.*

The Third BOOK.

CAP. I.

I. *The Partition of Sciences into Theology and Philoſophy.* II. *The Partition of Philoſophy, into three Knowledges; of God; of Nature; of Man.* III. *The Conſtitution of* Philoſophia Prima, *as the common Parent of All.*

CAP. II.

Of Natural Theology. § *Of the Knowledge of Angels and Spirits, an Appendix thereof.*

CAP. III.

The Partition of Natural Philoſophy into Speculative & Operative. § *Theſe two, both in the Intention of the Writer, and Body of the Treatiſe, ought to be ſeparate.*

CAP. IV.

I. *The Partition of Speculative Science concerning Nature, into Phyſick ſpecial, and Metaphyſick; whereof Phyſick inquires the Efficient Cauſe and the Matter: Metaphyſick the Final Cauſe of the Form.* II. *The Partition of Phyſick into the knowledges of the Principles of things; of the Fabrick of things, or of the World; and of the variety of things.* III. *The Partition of Phyſick reſpecting the variety of things, into the Doctrine of Concretes, and into the Doctrine of Abſtracts. The Partition of Concretes, is the ſame with the Diſtribution of Natural Hiſtory.* IV. *The Partition of the Doctrine of Abſtracts, into the knowledge of the Schemes of Matter; and into the knowledge of Motions.* V. *Two Appendices of Speculative Phyſick, Natural Problems; and the Placits of Ancient Philoſophers.* VI. *The Partition of Metaphſick, into the Doctrine of Forms; and into the Doctrine of Final Cauſes.*

CAP. V.

I. *The Partition of Operative knowledge concerning Nature, into Mecha-*

nick, and Magick: reſpondent to the Parts of Speculative knowledge; Mechanick to Phyſick; Magick to Metaphyſick. § *A purging of the word Magia.* II. *Two Appendices to Operative knowledge: An Inventory of the eſtate of Man.* § *A Catalogue of Polychreſts; or things of multifarious uſe.*

CAP. VI.

Of the great Appendix of Natural Philoſophy, as well Speculative as Operative; Mathematick knowledge: and that it ought to be placed rather amongſt Arpendices; than amongſt ſubſtantial Sciences. § *The Partition of Mathematicks into Pure, and Mixt.*

The fourth BOOK.

CAP. I.

I. *THe Partition of the Knowledge of Man, into the Philoſophy of Humanity, and Civil.* § *The partition of the knowledge of Humanity, into the knowledge touching the Body of Man; and into the knowledge touching the Soul of Man.* II. *The conſtitution of a general knowledge, touching the Nature and Eſtate of Man.* § *The partition of the knowledge concerning the Eſtate of Man, into the knowledge touching the Perſon of Man; and into the knowledge touching the League of Soul and Body.* § *The partition of the knowledge touching the Perſon of Man into the knowledge of Man's miſeries.* § *And of Man's prerogatives.* III. *The partition of the knowledge touching the League, into the knowledge of Indications,* § *And of Impreſſions.* § *The aſſignment of Phyſiognomy.* § *And of Interpretation of Natural Dreams: unto the Doctrine of Indications.*

CAP. II.

I. *The partition of the knowledge reſpecting the Body of Man, into Art Medicinal.* § *Coſmetick.* § *Athletick.* § *And Voluptuary.* II. *The partition of Medicine, into three duties.* § *Conſervation of Health.* III. *Cure of Diſeaſes.* IV. *And Prolongation of life: and that the laſt Part, Prolongation of life, ſhould be ſeparate from the other two.*

CAP. III.

I. *The partition of Humane Philoſophy touching the Soul, into the knowledge of the Inſpired Eſſence; and into the knowledge of the ſenſible, or traduced Soul.* § *The ſecond partition of the ſame Philoſophy, into the knowledge of the Suſtance and Faculties of the Soul. And into the knowledge of the Uſe, and Objects of the Faculties.* II. *Two Appendices of the knowledge, concerning the Faculties of the Soul, the knowledge of Natural Divination.* § *And the knowledge of Faſcination.* III. *The Diſtribution of the Faculties of the ſenſible Soul, into Motion, and Senſe.*

The fifth BOOK.

CAP. I.

I. *THe partition of the knowledge which reſpecteth the uſe and objects of the Faculties of the Mind of Man, into Logick, and Ethick.* II. *The Diviſion of Logick, into the Arts of Invention, of Judgement, of Memory, and of Tradition.*

CAP.

CAP. II.

I. *The partition of the Art of Invention, into the Inventive of Arts, and of Arguments.* § *The former of these which is the more eminent, is Deficient.* II. *The partition of the Inventive Art of Arts, into Literate Experience.* § *And a New Organ.* III. *A delineation of Literate Experience.*

CAP. III.

I. *The partition of the Inventive Art of Arguments, into Promptuary, or Places of Preparation: And Topick, or Places of Suggestion.* II. *The partition of Topicks, into General,* § *And particular Topicks.* III. *An Example of particular Topick in the Inquiry,* De Gravi & Levi.

CAP. IV.

I. *The partition of the Art of Judging, into Judgement by Induction,* § *And by Syllogism. Of the first a Collection is made in the* Novum Organum. § *The first partition of Judgement by Syllogism into Reduction, Direct, and Inverst.* § *The second partition thereof, into Analytick Art; and the knowledge of Elenches.* II. *The division of the knowledge of Elenches, into Elenches of Sophisms,* § *Into Elenches of Interpretation of Terms,* § *And into Elenches of Images or Idolaes.* III. *The division of Idolaes,* § *Into Impression from the general nature of Man, or* Idola Tribûs. § *Into Impressions from the Individual temper of Particulars, or* Idola Specûs. § *Into Impressions by words and Communicative nature, or* Idola Fori. IV. *An Appendix to the Art of Judging; namely of the Analogy of Demonstration according to the nature of the subject.*

CAP. V.

I. *The Partition of Art Retentive, or of Memory, into the Knowledge of the Helps of Memory.* § *And the Knowledge of Memory it self.* II. *The Division of the Doctrine of Memory, into Prenotion, and Emblem.*

The sixth BOOK.

CAP. I.

I. *The Partition of the Art of Tradition, into the Doctrine of the Organ of Speech. The Doctrine of the Method of Speech, and the Doctrine of the Illustration of Speech.* § *The partition of the Doctrine of the Organ of Speech, into the knowledge of the Notes of things; of Speaking, and of Writing: Of which the two last constitute Grammer, and the Partions thereof.* § *The Partition of the knowledge of the Notes of Things, into Hieroglyphicks; and into Characters Real.* II. *A second Partition of Grammer into Literary; and Philosophycal.* III. *The aggregation of Poesie referring to Measure, to the knowledge of Speech.* § *An aggregation of the knowledge of Ciphers to the knowledge of Scripture.*

CAP. II.

I. *The Doctrine of the Method of Speech is assigned a substantial and principal Part of Traditive knowledge: it is stiled the Wisdom of Delivery.* II. *The divers kinds of Methods are enumerated; their Profits and Disprofits annext.* § *The Parts of Method.*

CAP. III.

I. *The Grounds and Office of Rhetorick.* II. *Three Appendices which appertain only to the preparatory Part. The Colours of Good and Evil, as well simple as compared.* III. *The Anti-theta of Things.* IV. *Lesser stiles or usual Forms of Speech.*

CAP.

CAP. IV.

I. *Two general Appendices of Traditive knowledge: Art Critical.* II. *And Pedagogical.*

The seventh BOOK.

CAP. I.

I. THE *Partition of Moral Philosophy, into the knowledge of the Exemplar, or Platform; and into the Georgicks or Culture of the Mind.* § *The division of the Exemplar (namely of Good) into Good Simple, and Good Compared.* II. *The Partition of Good Simple, into Individual Good; and Good of Communion.*

CAP. II.

I *The Partition of individual or private Good, into Good Active; and Good Passive.* II. *The Partition of Passive Good, into Conservative Good; and perfective Good.* III. *The Partition of the Good of Communion, into General.* § *And into Respective Duties:*

CAP. III.

I. *The Partition of the Doctrine of the Culture of the Mind, into the knowledge of the Characters of the Mind.* II. *Of the Affections.* III. *Of the Remedies and Cures thereof.* IV. *An Appendix to the same Doctrine touching the Congruity between the Good of the Mind, and the Good of the Body.*

The eighth BOOK.

CAP. I.

THE *Partition of Civil knowledge,* § *Into the knowledge of Conversation.* § *The knowledge of Negociation.* § *And the knowledge of Empire or State-Government.*

CAP. II.

I. *The Partition of the knowledge of Negociation into the knowledge of dispersed Occasions.* II. *And into the knowledge of the Advancement of life.* § *Examples of the knowledge of scattered Occasions from some of* Solomons *Parables.* § *Precepts concerning the Advancement of Fortune.*

CAP. III.

The Partition of the Art of Empire or Government is omitted, only access is made to two Deficients. I. *The knowledge of enlarging the Bounds of Empire.* II. *And the knowledge of universal Justice, or of the Fountains of Law.*

The ninth BOOK.

CAP. I.

THE *Partitions of inspired Theology are omitted, only way is made unto three Desiderates.* I. *The knowledge of the right Use of Humane Reason in matters Divine.* II. *The knowledge of the degrees of unity in the City of God.* III. *The Emanations of SS. Scripture.*

FRAN-

FRANCISCI

DE

VERULAMIO

ARCHITECTURA Scientiarum.

THE

GENERAL IDEA

AND

PROJECT

OF THE

LORD *VERULAM*'S

Inſtauratio Magna.

Repreſented in the

PLATFORM

OF THE

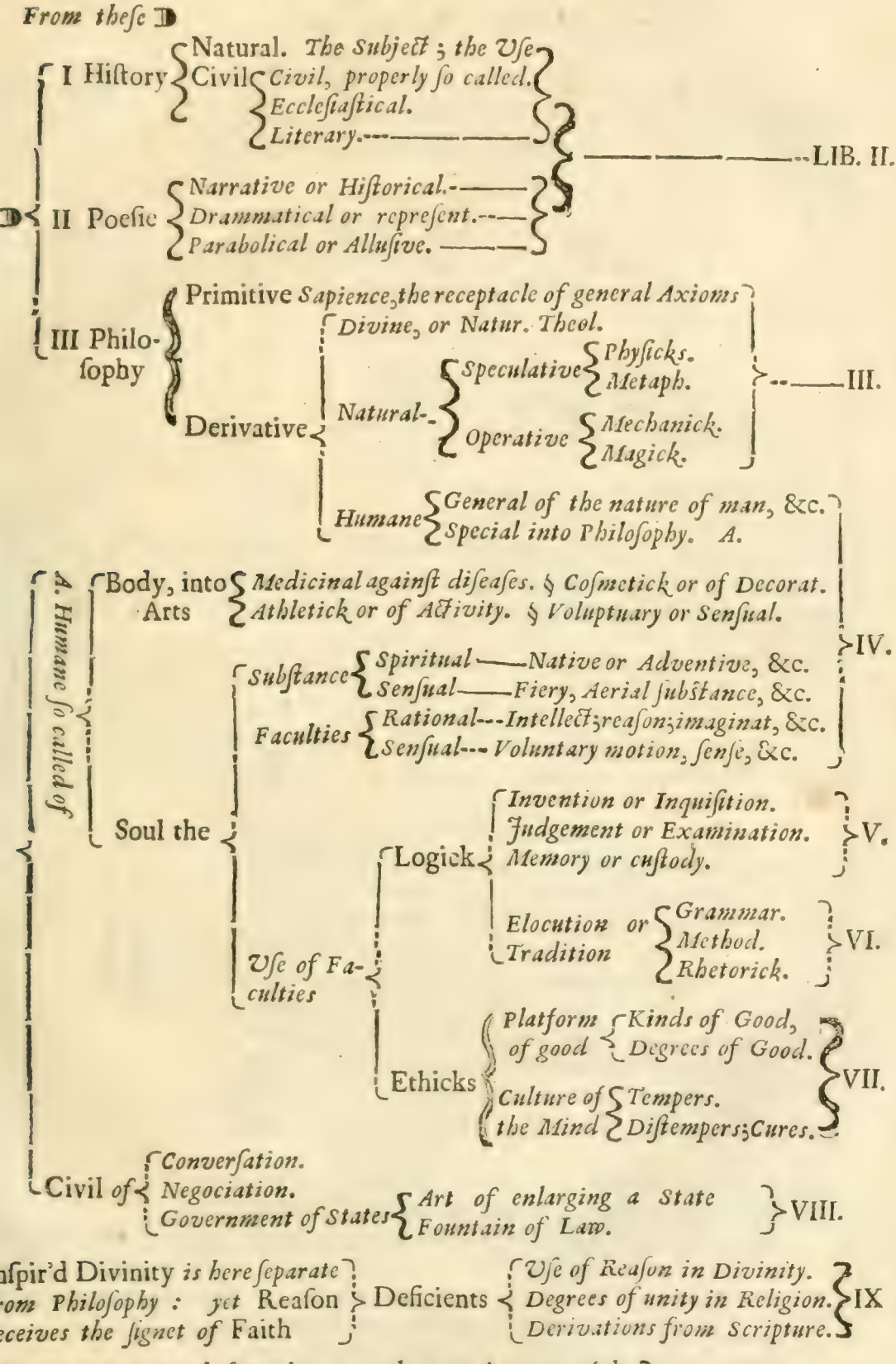
DESIGN

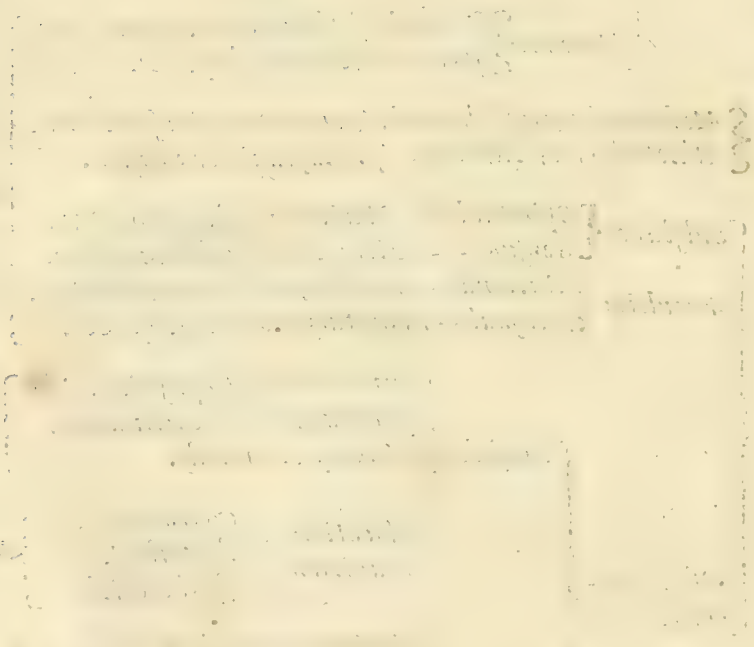
Of the Firſt Part thereof,

As it was conceiv'd in the Mind of the Author and is expreſſed in the Model of the Work.

DEUS OMNIA
IN MENSURA, ET NUMERO, ET ORDINE,
DISPOSUIT.

The Emanation of SCIENCES, from the Intellectual Faculties of MEMORY, IMAGINATION, REASON.





The Platform of the Design.

LIB. I. THE DIGNITY OF LEARNING.

Reporting the

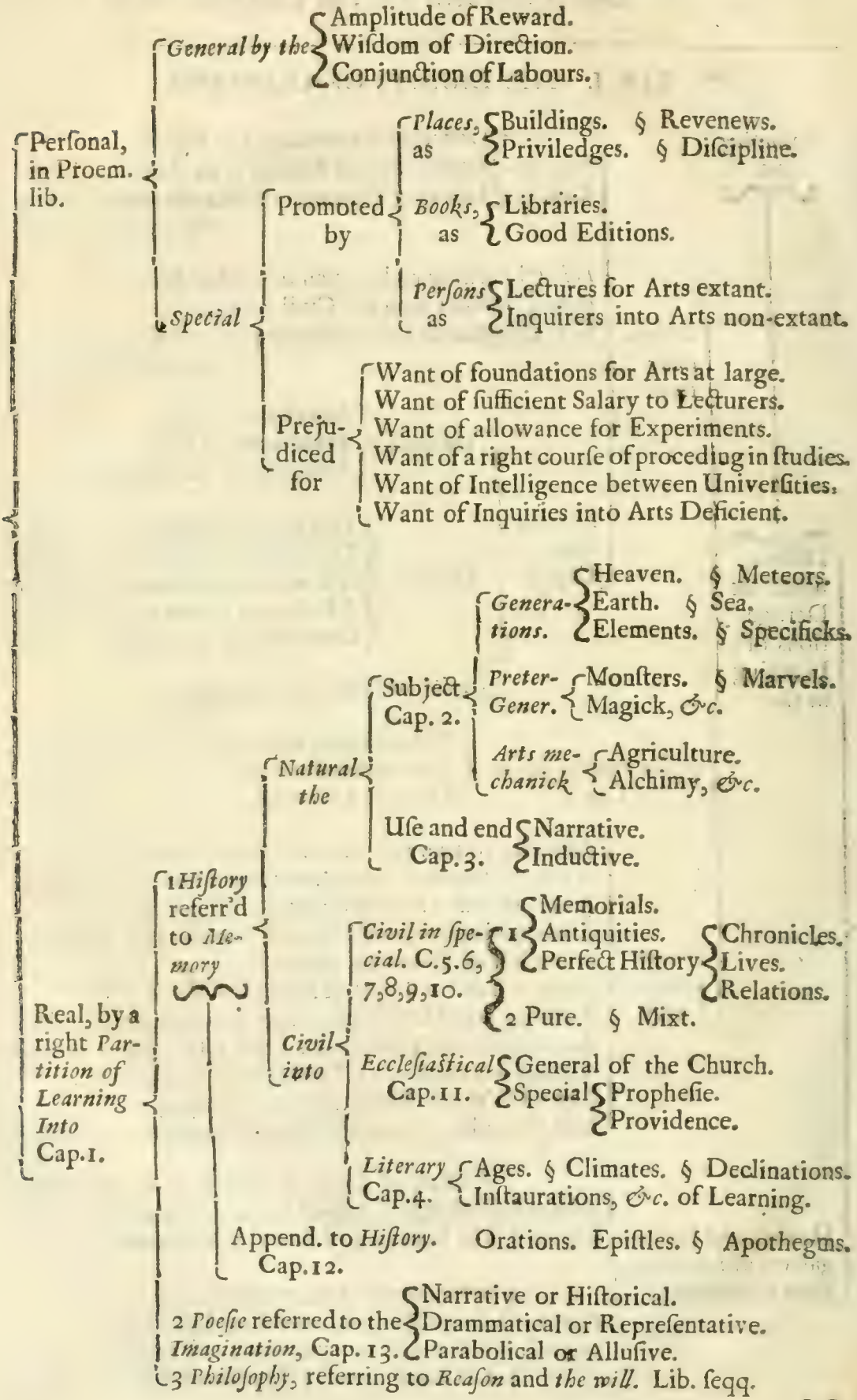
Dishonours & Derogations of Learning in the

- *Discredites* from
  - *Divines* Cap. 1.
    - Desire of Knowledge the first sin.
    - Knowledge an Infinite : an Anxious thing.
    - Learning the cause of Heresie and Atheism.
    - *Objected, Answered.*
  - *Politicks* C. 2.
    - Learning makes men unapt for Arms.
    - Disables men for Civil Affairs.
    - Particular indispositions pretended.
    - *Objected, Answered.*
  - *Learned Mens* Cap. 3.
    - *Fortunes*
      - Scarcity of means.
      - Privateness of life.
      - Meanness of imployment.
    - *Manners*
      - Too incompatible with the times.
      - Too sensible of the common good.
      - Not applying to Persons of quality.
      - A failing in points of behaviour.
      - Gross flattery practised by some.
    - *Studies* in some impertinents.
- *Distempers in studies* Cap. 4.
  - Phantastical Learning.
  - Contentious Learning.
  - Delicate Learning.
- *Peccant Humors* Cap. 5.
  - Affection to two extremes, *Antiquity, Novelty.*
  - A distrust that any thing *New* should now be found out.
  - A conceit that the best Opinions still prevail.
  - A too peremptory reduction of Sciences into Methods.
  - A neglect of *Primitive Philosophy.*
  - A divorce of the Intellect from the Object.
  - A contagion of Knowledge from particular inclinations.
  - An impatience of suspense : haste to Positive Assertion.
  - A Magistral manner of Tradition of Knowledge.
  - Aim of Writers, Illustration, not Propagation.
  - End of Studies, Curiosity, Pleasure, Profit, Promotion, *&c.*

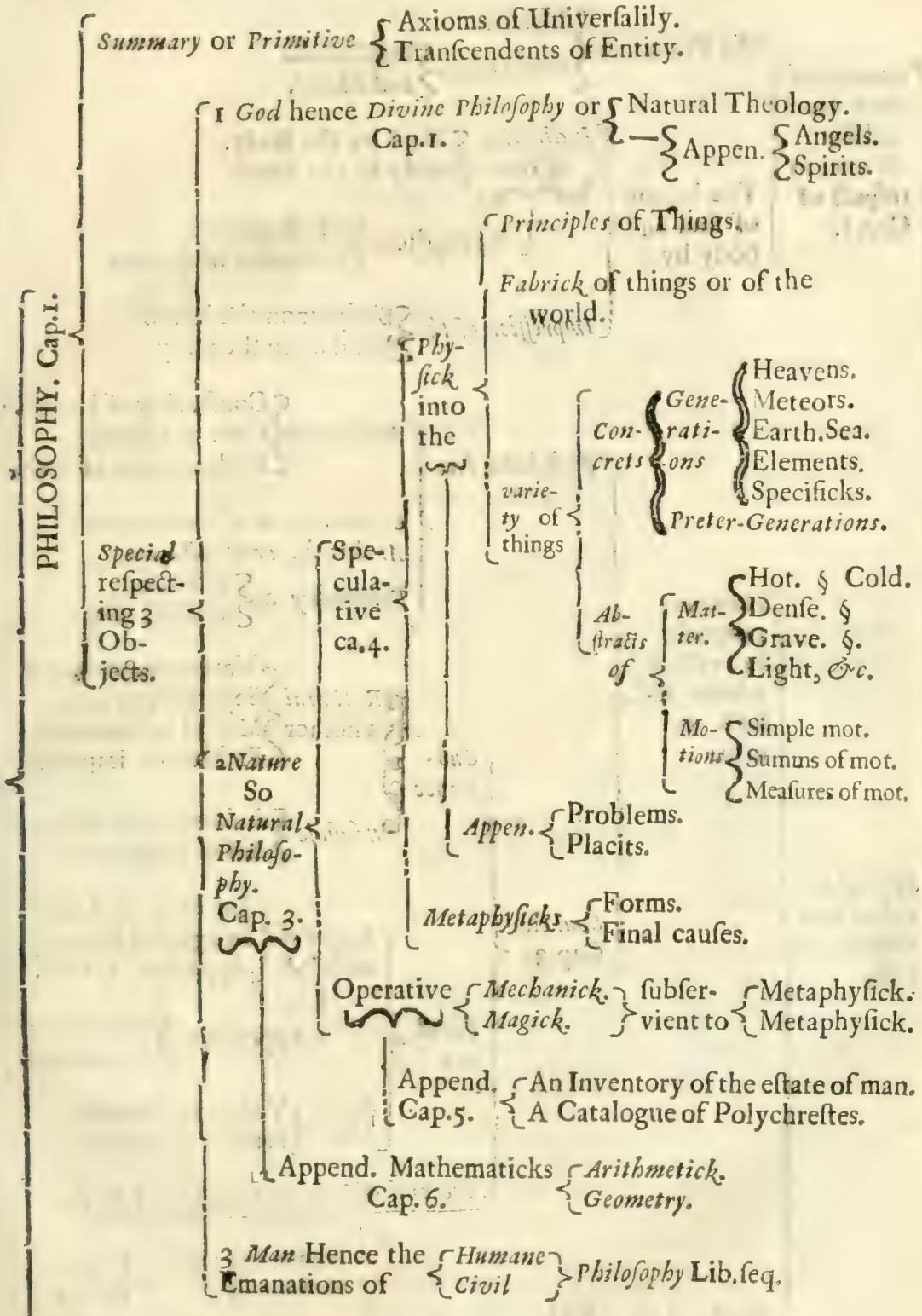
Honors, and Prerogatives of Learning from Arguments

- *Divine* Cap. 6.
  - Wisdom of God. § Angels of Illumination.
  - First light. § *Adams'*. § *Abel's*, Contemplation. *&c.*
  - The Learning of *Moses, Job, Solomon*, &c.
- *Humane* cap. 7. 8.
  - Inventors of Arts consecrated as Gods.
  - Civil Estates advanc'd by Learning.
  - The concurrency of Arms and Letters.
  - The Dominion. § Donations of Learning.

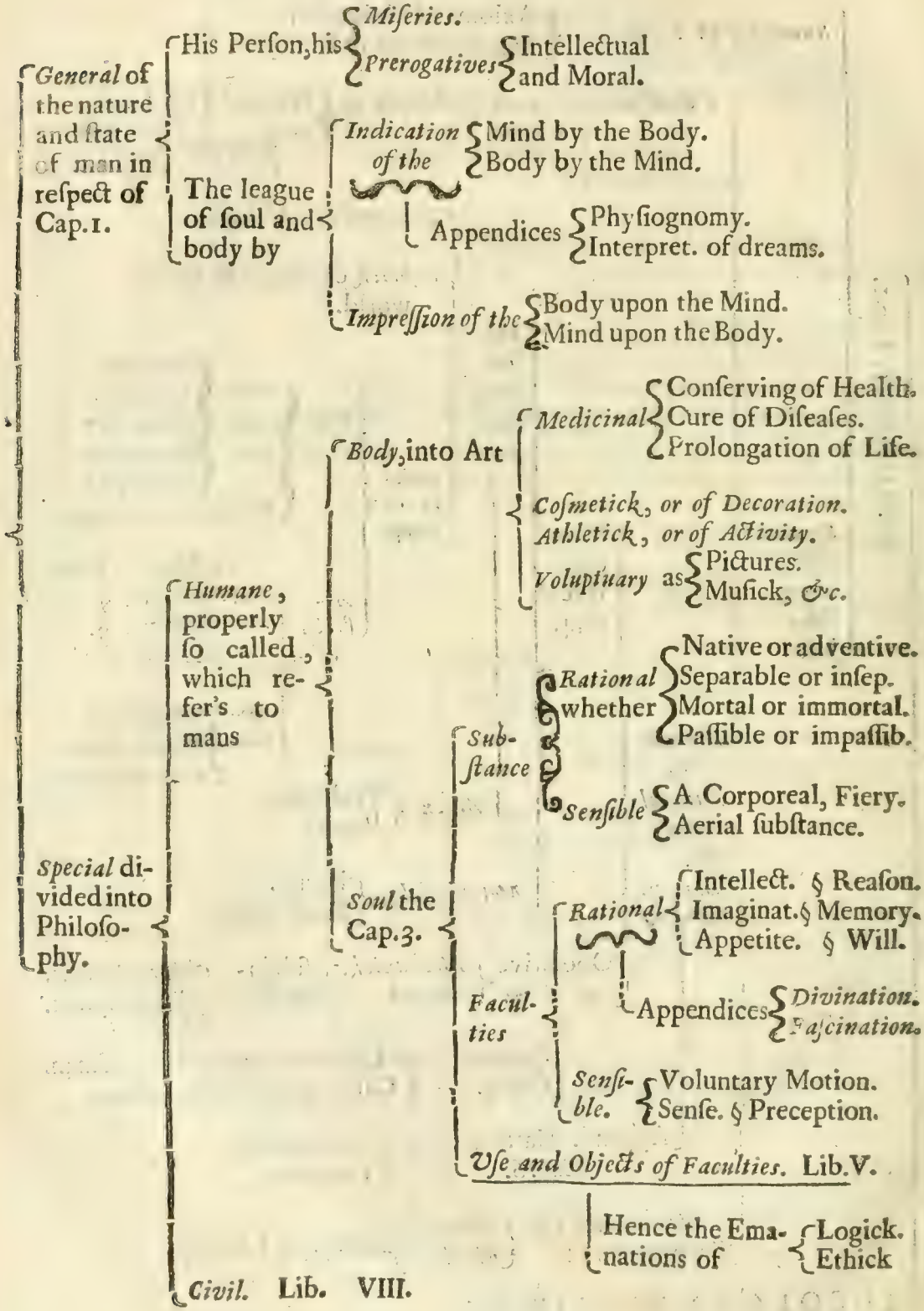
LIB. II. THE ADVANCEMENT OF LEARNING.



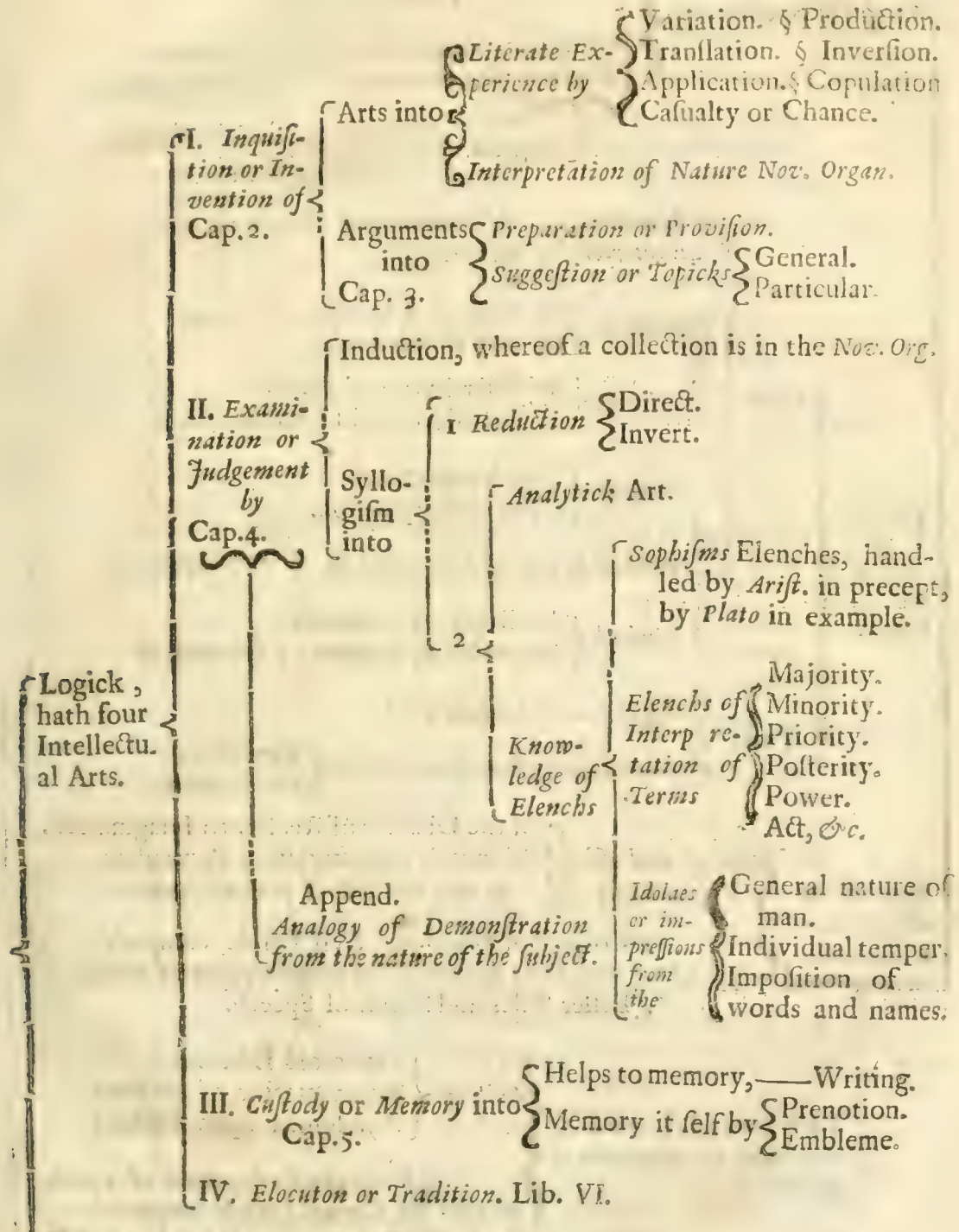
LIB. III. THE PARTITION OF KNOWLEDGES IN GENERAL INTO



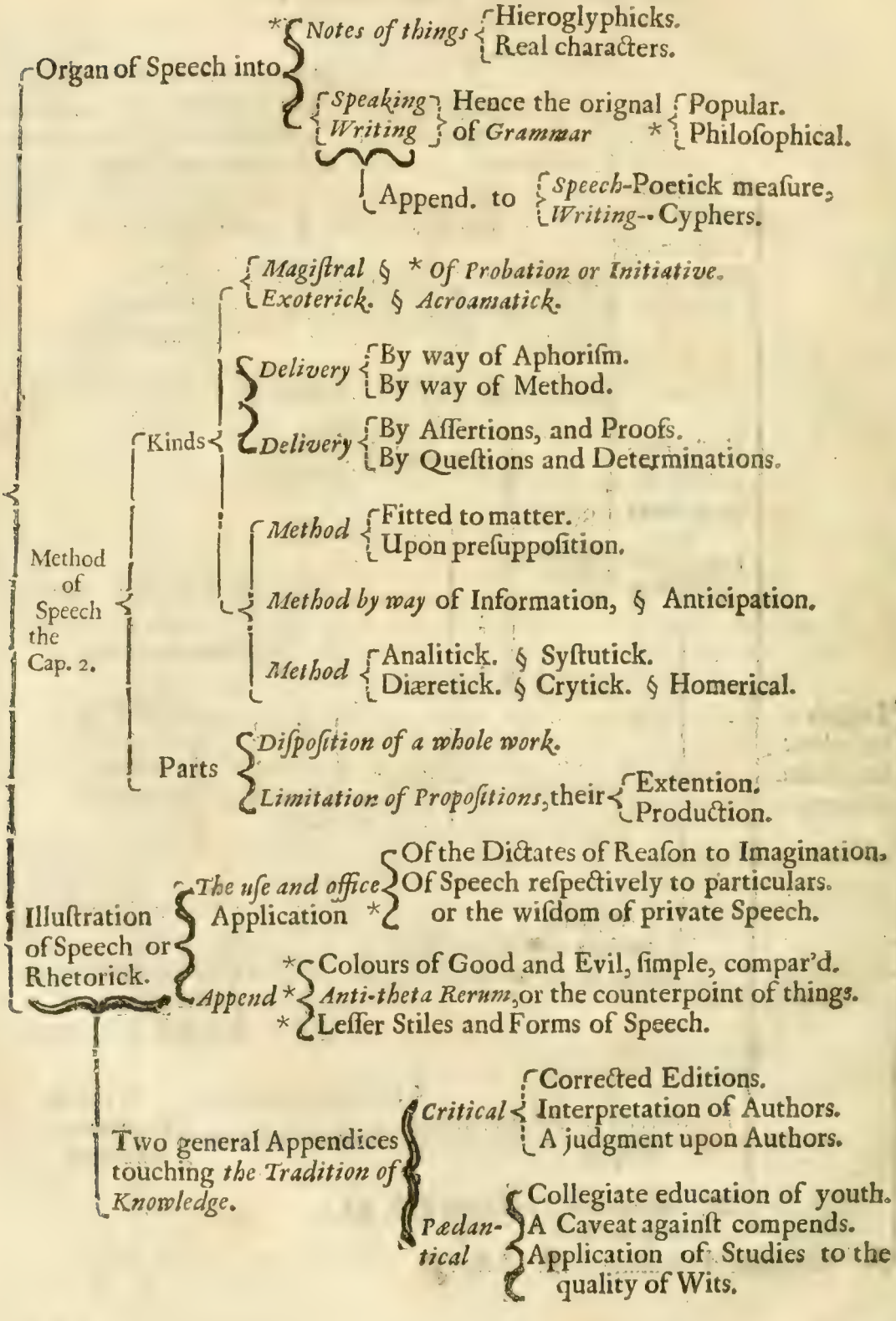
LIB. IV. THE PARTITION OF HUMANE KNOWLEDGE, OR THE KNOWLEDGE OF HUMANITY.



LIB. V. THE PARTITION OF THE USE AND OBJECTS OF THE FACULTIES OF THE MIND, INTO



LIB. VI. THE PARTITION OF THE ART OF ELOCUTION OR OF TRADITION INTO THE



LIB. VII. THE PARTITION OF MORAL KNOWLEDGE, INTO THE

LIB. VIII. THE PARTITION OF CIVIL KNOWLEDGE INTO

- Conversation Cap. 1.
  - Not Affected; much less despised.
  - But Moderated, that is either
    - *General in*
      - Speech in the
        - *Conception.*
        - *Utterance.*
      - Gesture of
        - *Speaker.*
        - *Hearer.*
    - *Respective to the*
      - Quality of Men.
      - Nature of Matter. §
      - § Of time. § Of Place.
- Negotiation. Cap. 2.
  - *Scattered occasions*, examples thereof out of *Solomons* Proverbs.
  - *The Advancement of Fortune* Precepts thereof
    - Summary in the
      - *Knowledge of*
        - *Six ways by*
          - Countenance. Works.
          - Actions. Nature.
          - Ends. Reports.
        - Others
        - *Three ways*
          - Acquaintance with men well seen in the world.
          - A wise temper in liberty of speech and silence.
          - A present dexterity both to observe and act.
        - *How his Nature and abilities sort with*
        - Himself
          - The estate of the present time : Professions that are in prize: His competitors in fortune : The Friends he hath chosen : The examples he would follow.
      - *Art of*
        - Setting forth his Vertues; Fortunes; Merits.
        - Concealing his Defects, and Disgraces, by
          - *Caution.*
          - *Colour.*
          - *Confidence.*
        - Declaring a Man's mind in particulars by a mediocrity of Revealing, Concealing.
        - Framing the mind to become flexible to occasions, of place, time, and persons, *&c.*
    - Spars'd
      - That he be well skill'd what instruments to use and how.
      - That he overtask not his own abilities.
      - That he do not always stay for, but sometimes provoke occasions.
      - That he never undertake great, or long works.
      - That he never so engage himself but that he leave a postern door open for retreat.
      - That he so love, as he may hate upon occasion.
- Government of States Cap. 3.
  - Partitions omited
    - * *The art of enlarging an Estate.*
    - *Deficients*
      - * *The fountains of Laws.*
        - Certain in the intimation.
        - Just in the commandment.
        - Fit to be put in execution.
        - Agreeing with the form of the state.
        - Begetting vertue in the Subjects.

LIB. IX. INSPIRED THEOLOGY.

The Partition of Inspired Divinity is omitted, only an entrance is made unto three DEFICIENTS.

- Deficients
  - I * *The Limits and Use of HUMANE REASON in Matters DIVINE.*
    - The
      - *Use it self*
        - Explication of Divine Mysteries.
        - Inferences thence deduced.
      - *Excesses in that Use*
        - Mining into things not revealed by a too Curious inquiry.
        - Attributing equal Authority to *Derivations*, as to *Principles* themselves.
  - II * *The Degrees of Unity in the City of God.*
    - *In Points*
      - Fundamental; one Lo. one Faith, &c.
      - Superstructive or of perfection.
    - ¶
      - A dissent *in Fundamental Points*, discorporates men from the Church of God; not so *in superstructive Points.*
  - III * *Emanations from Scripture wherein are observed*
    - *Errors in Interpretation*
      - In supposing that all Philosophy is derived from Scripture, as the School of *Paracelsus* did, and some others now do.
      - In Interpreting Scripture as one would a humane Author; whereas two things were known to God which are not known to Man
        - The
          - *Secrets of the Heart.*
          - *Succession of Times.*
    - *A Desiderate*
      - A Collection of Positive Divinity upon particular Texts in brief observations.
      - Prejudiced
        - by
          - *Dilating into commmon places.*
          - *Chasing after Controversies*
          - *Reducing to Methods.*

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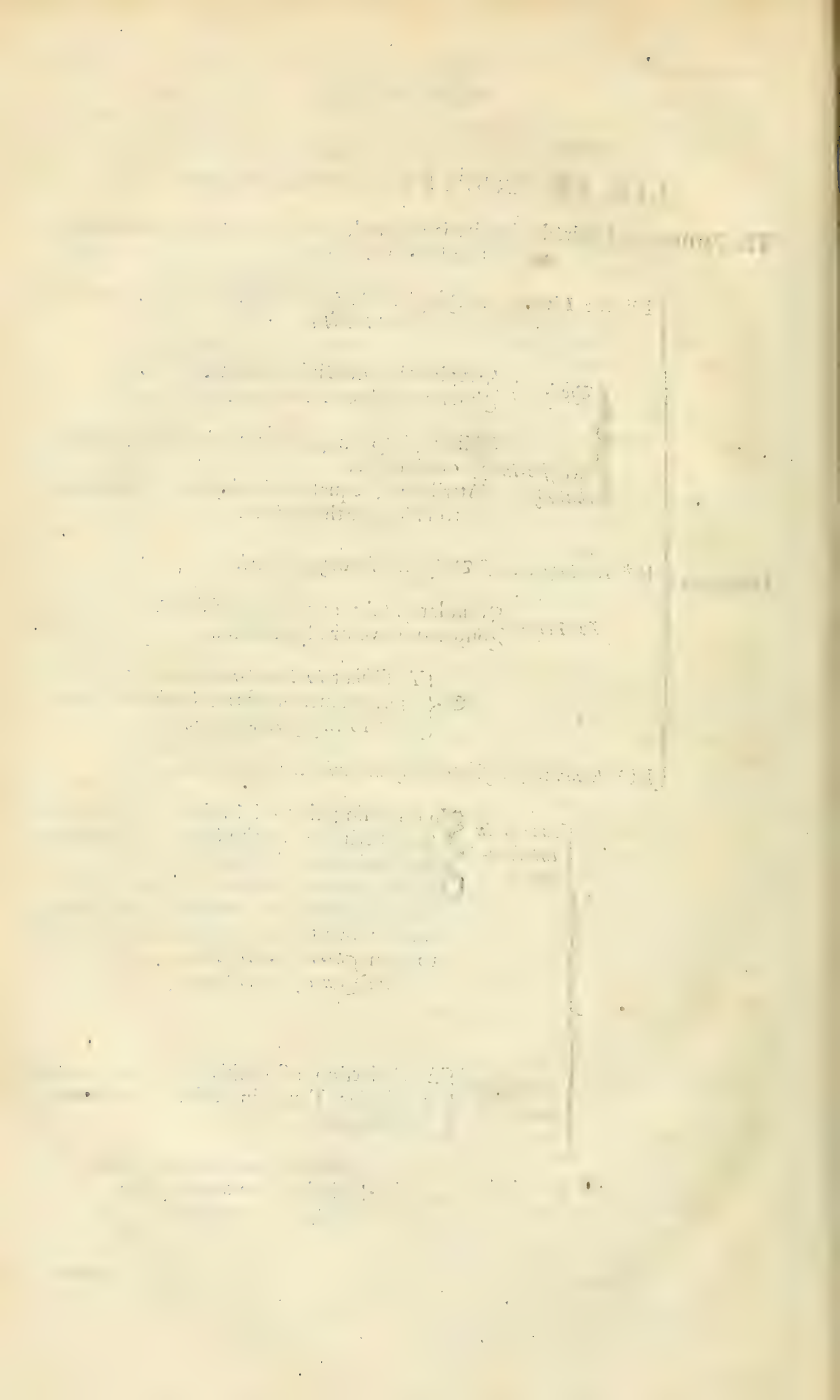

FRANCIS L. VERULAM
VICOUNT S^t. *ALBAN*,
OF THE
Dignity and Advancement
OF
LEARNING.

THE FIRST BOOK.

CHAP. I.

The Conſecration of this Work unto the moſt learned of Princes, K. James, *who in high, but juſt, conceptions is here admired.* § *The Diſtribution, into the* Dignity *and the* Proficiency *of* Learning. I. *Diſcredits of* Learning, *from the objections of* Divines : That the aſpiring unto Knowledge was the firſt Sin. That Learning is a thing infinite, and full of Anxiety. That Knowledge enclines the Mind to Hereſie and Atheiſm. II. *The ſolution* : *Original Guilt was not in the* Quantity, *but in the* Quality *of* Knowledge. § *The Corrective hereof,* Charity. III. *Againſt* Infinity, Anxiety, *and* Seducements of Sciences ; *three Preſervatives :* That we forget not our mortality. § That Learning give us content. § That it ſoar not too high. § *And ſo Philoſophy leads the mind by the Links of* Second Cauſes, *unto the* Firſt.

THere were under the Old Law (Excellent *King*) both *Free-will-offerings*, and *Daily Sacrifices* ; the one proceding upon ordinary obſervance ; the other upon a devout Chearfulneſs. Certainly, in my opinion, ſome ſuch kind of Homage belongs to *Kings* from their ſervants ; namely, That every one ſhould tender, not only Tributes of his Duty, but Preſents of Affection. In the former of theſe, I hope, I ſhall not be wanting ; for the latter I was in ſuſpenſe what I ſhould moſt principally undertake, and in concluſion I thought it more reſpective to make choice of ſome Oblation, which might refer, rather to the propriety and excellency of your individual Perſon, than to the buſineſs of your Crown and State.

§ Repreſenting your Majeſty, as my duty is, many times unto my mind, (leaving aſide the other parts, whether of your Vertue, or of your Fortune) I have been poſſeſt with extreme wonder, when I conſider the

excellency of thoſe Vertues and Faculties in you, which the Philoſophers call intellectual; the capacity of your Mind comprehending ſo many and ſo great Notions, the faithfulneſs of your Memory, the ſwiftneſs of your Apprehenſion, the penetration of your Judgment, the order and facility of your Elocution. In truth *Plato*'s Opinion ſometimes comes into my mind, which maintains, *That knowledge is nothing elſe but remembrance; and that the mind of man by nature knows all things, once redimed and reſtored to her own native light, which the cloudy vault or gloomy tabernacle of the body had oreſpread with darkneſs.* For certainly the beſt and cleareſt Inſtance for this Aſſertion ſhines in your Majeſty, whoſe mind is ſo ready to take flame from the leaſt occaſion preſented, or the leaſt ſpark of anothers Knowledge delivered. Wherefore as the ſacred Scripture ſaith of the wiſeſt King, *That his heart was as the ſands of the ſea:* which though it be one of the largeſt Bodies, yet it conſiſteth of the ſmalleſt portions; ſo hath God given your Majeſty a compoſition of Underſtanding exceeding admirable, being able to compaſs and comprehend the greateſt matters, and nevertheleſs, to apprehend the leaſt, and not to ſuffer them to eſcape your Obſervation: Whereas it ſhould ſeem very difficult, or rather an impoſſibility in nature, for the ſame Inſtrument to make it ſelf fit for great and ſmall works. And for your gift of Speech, I call to mind what *Cornelius Tacitus* ſaith of *Auguſtus Cæſar*, *Auguſto* (ſaith he) *prompta ac profluens, quæ deceret principem, eloquentia fuit.* In truth if we note it well, Speech that is *Elaborate*, or *Affectate*, or *Imitating*, although otherwiſe excellent, hath ſomewhat ſervile in it and holding of the ſubject; but your Majeſties manner of Speech is indeed Prince-like, flowing as from a Fountain, and yet ſtreaming and branching it ſelf into Natures Order, full of Facility and Felicity, *Imitating none, and Inimitable of any.* And as in your Civil eſtate, reſpecting as well your Kingdom as your Court, there appeareth to be an Emulation and Contention of your Majeſties Vertue with your Fortune, namely, excellent moral Endowments with a fortunate Regiment; a pious and patient expectation when time was, of your greater Fortune, with a proſperous and ſeaſonable poſſeſſion of what was expected; a holy obſervation of the Laws of Marriage, with a bleſſed and happy fruit of Marriage in a moſt fair Progeny; a godly Propenſion and moſt beſeeming a Chriſtian Prince to Peace, with a fortunate concurrence of the like inclination in your neighbour Princes: So likewiſe in your intellectual Abilities, there ſeemeth to be no leſs Contention and Emulation; if we compare your Majeſties gifts of Nature with the rich Treaſury of multiplicious Erudition and the knowledge of many Arts. Neither is it eaſie to find any *King* ſince Chriſts time, which may be compared with your Majeſty for variety and improvement of all kind of Learning Divine and Humane. Let who will revolve and peruſe the Succeſſion of Kings and Emperours, and he ſhall find this judgement is truly made. For indeed it ſeemeth much in Kings, if by the compendious Extraction of other mens Wits and Labours, they can take hold of knowledge, or attain any ſuperficial ornaments or ſhews of Learning, or if they countenance and prefer learned men; but for a King, and a King born, to drink indeed the true Fountains of Learning, nay, to be himſelf a Fountain of Learning, is almoſt a Miracle. And this alſo is an acceſs to your Majeſty, that in the ſame Cloſet of your Mind, there are treaſured up as well Divine and Sacred Literature, as Prophane and Humane; ſo that your Majeſty

In Phædo.

1 Reg. 4.

Annal. 13.

jesty stands invested with that triplicity of Glory, which was ascribed to that famous *Hermes Trismegistus*, *The Power of a King, the Illumination of a Priest, the Learning of a Philosopher.* Wherefore since in these glorious Attributes of Learning, so inherent and individual in your Person, your Majesty so far excels all other Kings, it is very meet that such rare endowments of Nature and Art should be celebrated, not only in the fame or admiration of the present time, or in light of History conveyed over to Posterity, but be engraven in some solid Work, which both may express the Power of a great King, and bear a Character or Signature of so excellent a learned King. Now (to return to our intended purpose) I concluded with my self that I could not make to your Majesty a better oblation, than of some Treatise tending to that end.

§ The Sum and Argument hereof will consist of *two Parts: In the former*, which is more slight and popular (yet may not be past over) we shall entreat of the *excellency of Knowledge and Learning, through all the parts thereof*; and likewise of the *merit of those who have worthily and wisely imployed and placed their bounties and industries in the Augmentation, and Propagation thereof. In the latter Part* (which is the main and sum of this work) *I shall propound and set down what in this kind hath been embraced, undertaken and accomplisht hitherto, for the Advancement of Learning: and again briefly touch at such particulars as seem deficient in this enterprize*; to the end that though I dare not presume positively to separate and select what I would chiefly commend unto your Majesty; yet by representing many and different Observations, I may excite your Princely Cogitations to visit the peculiar Treasures of your own Mind, and thence to extract what is most conducent to the *amplifying and enlarging of the bounds of Arts and Knowledges*, agreeable to your Magnanimity and Wisdom.

I. In the entrance to the *former Part*, to clear the way, and as it were, to make silence, to have the testimonies concerning the *Dignity* of Learning to be better heard, without the interruption of tacit Objections, I think good first to deliver Learning from the Discredits and Disgraces which Ignorance hath cast upon it, but Ignorance severally disguised; appearing and discovering it self sometime in the *zeal of Divines*, sometime in the *arrogancy of Politicks*, and sometimes *in the errors of Learned men themselves.* I hear the former sort say, *That Knowledge is of the nature and number of those things, which are to be accepted with great Limitation and Caution; That the aspiring to overmuch Knowledge, was the original temptation and sin, whereupon ensued the Fall of Man; And that even at this day Knowledge hath somewhat of the Serpent in it, and therefore where it entreth into a man, it makes him swell, Scientia inflat*; That *Solomon* gives a censure, *That there is no end of making Books, and that much reading is a wearinesse to the flesh*; and again in another place, *That in spacious knowledge there is much contristation, and that he that encreaseth knowledge, encreaseth anxiety*; That St. *Paul* gives a caveat, *That we be not spoiled through vain Philosophy*; And that experience demonstrates how the Learnedst men have been Arch-hereticks; How Learned times have been inclined to Atheism, and how the Contemplation of second Causes doth derogate from the Authority of the first.

1 Cor. 8. Eccles. 12. Eccles. 1. Colos. 2.

II. To discover then the error and ignorance of this Opinion, and the misunderstanding in the grounds thereof, any man may see plainly that

theſe men do not obſerve and conſider, That it was not that *Pure and Primitive Knowledge of Nature*, by the light whereof man did give names to other Creatures in Paradiſe, as they were brought before him, according to their Proprieties, which gave the occaſion to the Fall; but it was that proud Knowledge of *Good and Evil*, with an intent to ſhake off God and to give Law unto himſelf. Neither is it any *Quantity of Knowledge*, how great ſoever, that can make the mind of man to ſwell; for nothing can fill, much leſs extend the Soul of man but God, and the contemplation of God: therefore *Solomon* ſpeaking of the two Principal Senſes of Inquiſition, the Eye and the Ear, affirms, *That the Eye is never ſatisfied with ſeeing, nor the Ear with hearing*; and if there be no fulneſs, then is the Continent greater than the Content. So of Knowledge it ſelf and the Mind of Man, whereto the Senſes are but Reporters, he defines likewiſe in the Words plac'd after the Calendar or Ephimerides which he makes of the diverſity of times and ſeaſons for all Actions and Purpoſes, concluding thus, *God hath made all things beautiful and decent in the true return of their ſeaſons; alſo he hath placed the world in mans heart, yet cannot man find out the work which God worketh from the beginning unto the end*: By which words he declares, not obſcurely, that God hath framed the Mind of Man, as a Mirror or Glaſs capable of the Image of the univerſal world, and as joyful to receive the Impreſſions thereof, as the Eye joyeth to receive Light; and not only delighted in the beholding the variety of things and the viciſſitudes of times, but raiſed alſo to find out and to diſcern the inviolable Laws and infallible Decrees of Nature. And although he ſeem to inſinuate that the ſupreme or ſummary Law of Nature, which he calleth *the work which God worketh from the beginning to the end*, is not poſſible to be found out by Man; yet that doth not derogate from the Capacity of the Mind, but may be referred to the impediments of Knowledge, as the ſhortneſs of life, the ill conjunction of labours deprav'd, and unfaithful Tradition of Knowledge over from hand to hand; and many other inconveniencies wherewith the condition of Man is enſnared and involved. For that no parcel of the World is denied to Man's enquiry or invention he clearly declares in another place, where he ſaith, *The ſpirit of a man is as the Lamp of God wherewith he ſearcheth the inwards of all ſecrets*. If then ſuch be the capacity and receipt of the Mind of Man, it is manifeſt that there is no danger at all from the *Proportion* or *Quantity* of *Knowledge* how large ſoever, leſt it ſhould make it ſwell or out-compaſs it ſelf; but merely in the *Quality*, which being in Quantity more or leſs, if it be taken without the true Corrective thereof, hath in it ſome nature of malignity, or venom full of flatuous ſymptoms. This Antidote, or Corrective ſpice, the mixture whereof tempers Knowledge and makes it ſo ſovereign, is *Charity*, which the Apoſtle immediately adds in the former clauſe, ſaying, *Knowledge blows up, but Charity builds up*; Not unlike to that which he delivers in another place, *If I ſpake* (ſaith he) *with the tongues of Men and Angels and had not Charity, it were but as a tinkling Cymbal*: Not but that it is an excellent thing to ſpeak with the tongues of Men and Angels, but becauſe if it be ſever'd from *Charity*, and not refer'd to the publick good of Mankind, it rather exhibits a vain and empty glory, than any ſubſtantial and ſolid fruit.

Eccleſ. 1.

Eccleſ. 3.

1 Cor. 8.

1 Cor. 13.

As for that Cenſure of *Solomon*, *concerning the exceſs of writing and reading*

reading Books, and the anxiety of ſpirit which redoundeth from Knowledg, and that admonition of S. *Paul, that we be not ſeduced by vain Philoſophy*; if thoſe places be rightly underſtood, they do very excellenty ſet forth the true bounds and limitations, whereby humane knowledge is confin'd and circumſcribed, yet ſo as without any ſuch contracting and coarctation, it may comprehend all the univerſal nature of things. Theſe limitations are three: *The firſt, that we do not ſo place our felicity in Knowledge, as we forget our Mortality: The ſecond, that we make application of our Knowledge, to give our ſelves repoſe and contentment and not diſtaſte or repining: The third, that we do not preſume by the contemplations of Nature to attain the Myſteries of God.* § For as touching *the firſt, Solomon* doth excellently expound himſelf in the ſame Book; *I ſaw well,* ſaith he, *that knowledge recedes as far from ignorance as light doth from darkneſs, and that the wiſe mans eyes keep watch in his head, whereas the fool roundeth about in darkneſs; but withal I learned that the ſame mortality involves them both.* Eccleſ. 2.

§ *For the ſecond,* certain it is, no anxiety, or perturbation of mind reſulteth from knowledge, otherwiſe than merely by accident: For all knowledge and wonder (which is the ſeed of knowledge) is an impreſſion of pleaſure in it ſelf; but when we fall to framing concluſions out of our Knowledge, which obliquely applied to our particular purpoſes, either miniſter weak fears or vaſt deſires, then there grows that vexation and trouble of Mind, whereof we ſpeak: for then Knowledge is no more *Lumen ſiccum,* as *Heraclitus* the *Profound* would have it, *Lumen ſiccum optima anima,* but it becomes *Lumen madidum,* or *maceratum,* being ſteeped and infuſed in the humours of the Affections.

§ *The third rule* deſerves a little to be ſtood upon, and not to be lightly paſſed over: For if any man ſhall think by view and enquiry into theſe ſenſible and material things, to attain that light whereby he may reveal unto himſelf the Nature and Will of God, then indeed, *is he ſpoil'd through vain Philoſophy.* For the Contemplation of the Creatures, having regard to the Creatures themſelves, produceth Knowledge, but having regard to God, wonder only, which is a broken Knowledge. And therefore it was moſt aptly ſaid by one of *Plato*'s School, *That the ſenſe of man carries a reſemblance with the ſun, which opens and reveals the terreſtrial Globe, but conceals and ſeals up the ſtars and celeſtial Globe:* So doth the Senſe diſcover natural things, but it darkens and ſhuts up divine. And hence it hath proceded, that ſome of the choſen rank of the more learned have fallen into Hereſie, whilſt they have ſought to fly up to the ſecrets of the Deity, by the waxen wings of the Senſes. *Philo Jud. de Somniis.*

§ As for the conceit of thoſe who are of opinion that *too much knowledge ſhould encline the mind to Atheiſm, and that the ignorance of the ſecond Cauſes, ſhould be, as it were a Midwife to our Piety towards the firſt.* I would willingly charge theſe in the language of *Job, Will you lye for God as one man doth for another to gratifie him?* For certain it is that God works nothing in Nature according to ordinary courſe but by ſecond Cauſes; and if they would have it otherwiſe believed, it is mere impoſture, under colour of Piety to God, and nothing elſe but to offer unto the Author of Truth the unclean ſacrifice of a Lye. But farther, it is an aſſured truth and a concluſion of Experience, That a little or ſuperficial taſte of *Philoſophy,* may perchance incline the Mind of Man to *A-* Job 13.

theiſm

theism; but a full draught thereof brings the Mind back again to Religion. For in the entrance of Philosophy, when the second Causes, which are next unto the Senses, do offer themselves to the mind of man, and the mind it self cleaves unto them and dwells there, an oblivion of the highest Cause may creep in; but when a man passeth on farther and beholds the dependency, continuation and confederacy of Causes, and the works of Providence, then according to the Allegory of the Poets, he will easily believe that the *highest link of Natures chain must needs be tied to the foot of* Jupiter's *chair*. To close in a word; Let no man, upon a weak conceit of sobriety or ill applied moderation, think or maintain that a man can search too far, or be too well studied *in the Book of God's word*, or in *the Book of God's works*; *Divinity* or *Philosophy*; but rather let men awake themselves and chearfully endeavour, and pursue an endless progress or proficiency in both: only let them beware lest they apply Knowledge to *swelling*, not to *charity*; to *ostentation* not to *use*: and again, that they do not unwisely mingle and confound these distinct Learnings of *Theology* and *Philosophy*, and their several waters together.

Homer. Iliad. 9.

CHAP. II.

I. Discredits of Learning from the objections of Politicks, *That Learning softens mens Natures, and makes men unfit for the exercise of Arms. That it perverts mens dispositions for matter of Government.* § *Other particular indispositions pretended.* II. The Solution. *Learning makes not men unapt for Arms.* III. *Learning enables men for Civil affairs.* IV. Particular seducements imputed to Learning; As, *Curious Uncertainty*, § *Pertinacious Regularity*, § *Misleading Precedents*, § *Retired slothfulness*, § *Relaxation of Discipline*, are all rather cured than caused by Learning.

I. NOw let us descend to the Disgraces whereby *Politicks* defame *Learning*; They be these, *That Learning doth soften mens manners, and makes them more unapt for the honour and exercise of Arms: That it doth marr and pervert mens dispositions for matter of Government and Policy*; which the study of Arts makes either too *Curious by vanity of Reading*; Or *too peremptory by the strict rigour of Rules*; Or *too overweening, by reason of the greatness of examples*; Or *too incompatible with the times, by reason of the dissimilitude of examples*; Or *at least it doth divert and alienate mens minds from business and action, instilling into them a love of leisure and privateness.*

§ *And that it doth bring into States a relaxation of Discipline, whilest every man is more ready to argue than obey.* Out of this conceit *Cato* surnamed the *Censor*, one of the wisest men indeed that ever liv'd, when *Carneades* the *Philosopher* came in Embassage to *Rome*, and that the young men of *Rome* began to flock about him, being allured with the sweetness and Majesty of his eloquence, gave counsel in open Senate, *That they should give him his dispatch with all speed, lest he should infect and inchant the minds*

Plato in M. Cato.

minds of the youth, and at unawares bring in an alteration of the manners and cuſtoms of the State. This ſame conceit or humor mov'd *Virgil*, preferring the honour of his country, before the reputation of his own Profeſſion, to make a kind of ſeparation between the *Arts of Policy*, and the *Arts of Literature*, challenging the one to the *Romans*, yielding the the other to the *Grecians*, in the verſes ſo much renowned,

Tu regere imperio populos Romane memento,
Hæ tibi erunt Artes——— Virgil. Æn. 6.

And we ſee that *Anytus* the accuſer of *Socrates*, laid it as an article of charge and accuſation againſt him, that he did with the variety and power of diſcourſes and diſputation, embaſe in the minds of young men, the Authority and Reverence of the Laws and Cuſtoms of their Country; and that he did profeſs a pernicious and dangerous Science, wherein, whoever was inſtructed, might make the worſe matter ſeem the better, and to ſuppreſs Truth by force of Eloquence. Plato Apol. Socr.

II. But theſe and the like imputations have rather a countenance of Gravity, than any ſincerity of Truth: For experience doth witneſs that the ſelf-ſame perſons, and the ſelf-ſame times, have flouriſht in the *glory of Arms and Learning*. As for men, we may inſtance in that noble pair of Emperors *Alexander the Great*, and *Julius Cæſar the Dictator*; the one was *Ariſtotle's* Scholar in Philoſophy; the other *Cicero's Rival* in Eloquence. But if any man had rather call for Scholars that have become great Generals, than Generals that were great Scholars, let him take *Epaminondas* the Theban, or *Xenophon* the Athenian; whereof the one was the firſt that abated the power of *Sparta*, and the other was the firſt that made way to the overthrow of the *Monarchy of Perſia*. And this *conjunction of Arms and Letters*, is yet more viſible in times than in perſons, by how much an Age is a greater object than a Man: For the ſelf-ſame times with the *Ægyptians*, *Aſſyrians*, *Perſians*, *Grecians* and *Romans*, that are moſt renowned for *Arms*, are likewiſe moſt admired for *Learning*; ſo that the graveſt Auctors and Philoſophers, the greateſt Captains and Governors have lived in the ſame Ages. Neither indeed can it otherwiſe be; for as in man the ripeneſs of the ſtrength of the body and the mind comes much about one age, ſave that the ſtrength of the body comes ſomewhat the more early; ſo in States, the glory of Arms and *Learning* (whereof the one correſpondeth to the body, the other to the ſoul of man) have a concurrence, or a near ſequence of Time.

III. Now for *matter of Policy and Government*, that *Learning* ſhould rather be an *impediment than an adjument* thereunto is a thing very improbable. We all confeſs that it is an unadviſed act to commit a natural Body, and the cure of Health, to *Emperique Phyſitians*, who commonly have a few receipts which ſeem to them to be univerſal Remedies; whereupon they are confident and adventurous. when yet they neither know the cauſes of Diſeaſes, nor the Complexions of Patients, nor the peril of Symptomes, nor the Method of Cures. We ſee it a like error in thoſe, who for expedition of their Cauſes and Suits rely upon petty Advocates and Lawyers, which are only men of Practice, and not grounded in their Books, who are many times eaſily ſurpriz'd, when a new caſe falls out beſides the common Road of their experience: So by

like

like reaſon, it cannot but be a matter of doubtful conſequence, if States be managed by Emperique Stateſ-men. On the contrary, it is almoſt without inſtance, that ever any Government was diſaſtrous, that was in the hand of Learned Governours. For howſoever it hath been ordinary with Politick men to extenuate, and diſable Learned men by the name of Pedants, yet Hiſtory, which is the miſtreſs of Truth, makes it appear in many particulars, that the Government of Princes in minority, hath far excelled the Government of Princes of mature age, even for that reaſon which Politicks ſeek to traduce, which is, that by that occaſion the State hath been in the hands of Pedants. Who knows not that for the firſt five years ſo much magnified during the minority of *Nero*, the Burden of the State was in the hands of *Seneca* a *Pedant*? So likewiſe *Gordianus* the younger owes the ten years applauded government to *Miſitheus* a *Pedant*. And with the like happineſs *Alexander Severus* govern'd the State in his minority, in which ſpace women rul'd all, but by the advice and counſel of Preceptors and Teachers. Nay, let a man look into the Government of the *Biſhop of Rome*, as by name, into the Government of *Pius Quinctus* or *Sextus Quinctus* in our times, who were both at their entrance eſteemed but as *Pedantical Friars*; and he ſhall find, that ſuch *Popes* do greater things, and procede upon truer Principles, than thoſe which have aſcended to the Papacy from an education and breeding, in affairs of eſtate and Courts of Princes. For though men bred in learning are, perchance, not ſo quick and nimble in apprehending occaſions, and accommodating for the preſent to points of convenience, which the Italians call *Raggioni di Stato*, the very name whereof *Pius Quintus* could not hear with patience, but was wont to ſay, *That they were the inventions of wicked men, and repugnant to Religion and the moral Vertues*; yet in this there is made ample recompence, that they are perfect and ready, in the ſafe and plain way of Religion, Juſtice, Honeſty, and the Moral Vertues; which way, they that conſtantly keep and purſue, ſhall no more need thoſe other Remedies, than a ſound body needs Phyſick. And beſides, the ſpace of one mans life can not furniſh preſidents enough to direct the event of but one mans life. For as it hapneth ſometimes that the great Grand-child, Nephew or Pro-nephew, reſembleth the Grand-father, or great Grand-father more than the Father; ſo many times it comes to paſs, that the occurrences of preſent times may ſort better with ancient examples, than with thoſe of later or immediate times. Laſtly, the wit of one man can no more countervail the latitude of Learning, than one mans means can hold way with a common purſe.

Platon.

IV. And were it granted that thoſe *ſeducements* and *indiſpoſitions* imputed to Learning, by Politicks, were of any force and validity, yet it muſt be remembred withal, that *Learning* miniſtreth in every of them, greater ſtrength of medicine or remedy, than it offereth cauſe of *indiſpoſition* or *infirmity*. For if that *Learning* by a ſecret influence and operation makes the mind *irreſolute and perplext*, yet certainly by plain precept it teacheth how to unwinde the thoughts, how far to deliberate, when to reſolve; yea, it ſhews how to protract, and carry things in ſuſpenſe without Prejudice till they reſolve.

5 Be it likewiſe granted that *Learning makes the minds of men more peremptory and inflexible*, yet withal it teacheth what things are in their nature

nature demonſtrative, and what are conjectural; and propounds as well, the uſe of diſtinctions, and exceptions, as the ſtability of rules and principles.

§. Ee it again, *that learning miſleads and wreſteth mens minds, whether by diſproportion, or diſſimilitude of examples*, I know not, yet I know well, that it unfoldeth, and laies open as well the force of circumſtances, as the errors of compariſons, and the cautions of applications; ſo that in all theſe it doth more rectifie mens minds, then pervert them. And theſe remedies *Learning* doth every way convey and inſinuate by the quick penetration, and forcible variety of examples. Let a man look into the errors of *Clement* VII, ſo lively deſcribed by *Guicciardine*, who ſerved under him; or into the errors and waverings of *Cicero*, painted to the life by his own penſill, in *his Epiſtles to Atticus*, and he will fly a pace from being inconſtant and irreſolute in his deſigns. Let him look into the errors of *Phocion*, and he will beware how he be obſtinate or inflexible. Let him read the fable of *Ixion*, and it will diſpel vaporous hopes and ſuch like fumes and clouds. Let him behold *Cato* the *Second*, and he will never be one of the *Antipodes*, to tread oppoſite to the preſent world.

§ Now for the conceit, *That learning ſhould be a friend to ſloth, and ſhould oreſpread the mind with a ſweet ſlumber of repoſe and retiredneſs*; it were a ſtrange thing, if that which accuſtometh the mind to a perpetual agitation, ſhould be the *Patroneſs to ſlothfulneſs*: whereas contrariwiſe it may be truly affirmed, that no kind of men love buſineſs for it ſelf, but thoſe that are *Learned*; for other Perſons love affairs and buſineſs for the *Profit*, as hirelings the work, for the wages; others for *Honor*, for while they are in Action, they live in the eyes of men and refreſh their reputation, which othewiſe would wear; others for *Power* and the *Priviledges of Fortune*, that they may pleaſure their friends, and diſpleaſure their foes; others that they may *exerciſe ſome faculties wherein they take a pride*, and in this imagination, entertain their thoughts in a good humour and pleaſing conceit towards themſelves; others *to advance other ends*: ſo that as it is ſaid of untrue valours, that ſome mens valours are in the eyes of thoſe that look on, ſo the induſtry and courage of theſe men ſeems to aim at this, that other may applaud them, or they hugg themſelves in the contemplation of their own deſignments: only *Learned men* love buſineſs and imployment, as actions agreeable to nature, and no leſs healthful to the mind than exerciſe is to the body; taking pleaſure in the Action it ſelf, and not in the purchaſe: ſo that, of all men living, they are the moſt indefatigable, if it be towards any buſineſs, which can repleniſh and detain the mind according to the dignity thereof. And if there be found ſome laborious in reading and ſtudy, and yet idle in buſineſs, and action, this grows not from learning, but from ſome weakneſs or ſoftneſs of body or mind, ſuch as *Seneca* ſpeaks of, *Quidam* (ſaith he) *tam ſunt umbratiles ut putent in turbido eſſe quicquid in luce eſt.* Well may it be, that ſuch a point of a mans nature may make him give himſelf to learning, but it is not learning that breeds, or implants any ſuch point in his nature. But if any man notwithſtanding reſolvedly maintaineth, *that Learning takes up too much time which might otherwiſe be better imployed*; I anſwer, that no man can be ſo ſtraitned and oppreſt with buſineſs, and an active courſe Controv. lib. 4. Prov.

of life, but may have many vacant times of leasure, whilst he expects the returns and tides of business, except he be either of a very dull temper and of no dispatch; or ambitious (little to his credit and reputation) to meddle and ingage himself in imployment of all natures and matters above his reach. It remaineth therefore to be enquired, in what matter, and how, those spaces and times of Leasure, should be filled up and spent; whether in pleasures or study; sensuality; or contemplation, as was well answered by *Demosthenes* to *Æschines*, a man given to pleasure, who when he told him by way of reproach, *that his orations did smell of the Lamp, indeed* (said *Demosthenes*) *there is great difference between the things that You and I do by lamp-light:* Wherefore let no man fear lest learning should *expulse business*; nay rather it will keep and defend the possessions of the mind, against idleness and pleasure, which otherwise, at unawares, may enter, to the prejudice both of Busines and Learning.

Plut. in Demost.

§ Again, whereas they object, *That learning should undermine the reverence of Laws and Government*, it is a meer calumny without all shadow of truth: For to say that a blind obedience should be a surer obligation then an ocular duty, is all one to say, that a blind man may tread surer by a guide, then a seeing man can with the use of a light and his eyes. Nay it is without all controversie that Learning doth make the mind of man, gentle, ductile, maniable and pliant to government; whereas ignorance makes them churlish, thwart, and mutinous; which the Records of time do clearly manifest, considering that the most unlearned, rude and barbarous times have been most subject to seditions, tumults and changes. As for the judgement of *Cato* the *Censor*, he was well punisht for his *blasphemy against learning*: For when he was past threescore years old, he was taken with an extreme desire to go to the school again, and to *learn the greek tongue*; which doth well demonstrate that his former censure of the Grecian Learning was rather an affected gravity, than the inward sense of his own opinion. As for *Virgil's verses*, though it pleased him to brave the world in taking to the *Romans* the *Art of Empire*, and leaving to others all other *Arts*, as popular and servile; yet so much is manifest, that the Romans never ascended to that *hight of Empire*, till the time they had ascended to the *hight of Arts*. For in the time of the two first *Cæsars*, Persons most perfect in the State-principles of Government, there lived contemporaries, *the best Poet*, *Virgilius Maro*; *the best Historiographer*, *Titus Livius*; *the best Antiquary*, *Marcus Varro*; *the best or second Orator Marcus Cicero*; without question the chiefest, every one in their several faculty, that to the memory of man are known. Lastly, as for the *accusation of Socrates*, only this I say, The time must be remembred when it was prosecuted, namly under the *thirty Tyrants*, of all mortals the bloodiest, basest and most unworthy of Government: which revolution of State and Time was no sooner over, but *Socrates*, whom they had made a Person Criminal, was made a Person Heroical, and his Memory accumulate with all honours divine and humane; and those Discourses of his, which were then termed Corrupting of Manners, were after celebrated by all Posterity for most soveraign medicines of Mind and Manners. And let this serve for answer to *Politiques*, which in their humorous severity, or in their feigned gravity, have presumed to throw

Plut. in M. Cato.

imputations

imputations upon Learning; which redargution nevertheleſs, ſave that we know not whether our labours may extend to other ages, ſeems not ſo needful for the preſent, ſeeing the aſpect and favour of two moſt learned Princes (*Queen* Elizabeth *and Your Majeſty*, being as *Caſtor* and *Pollux*, *Lucida Sidera*, Stars of a moſt benign influence) hath wrought in us of Britain, *ſo much love* and *reverence towards Learning*.

CHAP. III.

I. *Diſcredits of Learning from* Learned mens Fortunes, Manners, Nature of ſtudies. II. In the Fortunes *ſcarcity of Means*, § *Obſcurity of life*. § *Meanneſs of Imployment*. III. In their Manners, *Too Regular for the times*, §. *Too ſenſible of the good of others, and neglective of their own*. § *They fail in applying themſelves to Particular Perſons*. § *They fail in ſome points of Behaviour*. § *Groſs Flattery practis'd by ſome Learned*; § *Inſtanced in the Modern Dedication of Books*. §. *Diſcreet Morigeration allowed*.

I. NOw come we to the third ſort of Diſcredit or Diminution of Credit, that redounds upon Learning from learned men themſelves, which commonly cleaveth faſteſt. It is derived either from *their Fortune*, or from *their Manners*, or from *the Nature of their ſtudies*; whereof the firſt is not in their power; the ſecond is not to the point; ſo as the third aloneſeemeth properly to fall into enquiry: but becauſe we are not in hand with the true value of things, but with popular eſtimation, it will not be amiſs to inſinuate ſomewhat alſo of the two former.

II. The Derogations therefore, or Diminutions of Credit which grow to Learning *from the fortune of the Learned men*, are taken either from their *Poverty and ſcarcity of Means*; or from their *obſcure and private courſe of Life*; or from the *meanneſs of imployment wherein they are converſant*.

§. As concerning *Want*, and that uſually is the caſe of Learned men, that they are *poor*, and commonly begin with little, and grow not rich ſo faſt as other men, which convert their labours cheifly to lucre and encreaſe; it were good to leave the common Place in Commendation of *Poverty* to ſome *Frier Mendicant* to handle, (if by their leaves I may be ſo bold) to whom much was attributed by *Machiavell* in this point, when he ſaid, *that the Kingdom of the clergie had been long before at an end, if the reputation and reverence towards the poverty of Friers and Monks, had not born out the ſcandals of the ſuperfluities and exceſſes of Biſhops and Prelates*: ſo a man might ſay that the felicity and magnificence of Princes and great Perſons, had long ſince turned to Barbariſm and Rudeneſs, if the *Poverty of Learning* had not kept up civility and honour of life. But without ſuch advantages of hunting after the praiſe thereof it is worthy obſervation, what a ſacred and reverend thing *Poverty of Fortune* was, for ſome ages in the Roman State, which yet was a State without Paradoxes: For thus ſaith *Titus Livius* in his introduction

Dell. Hiſt. Flor. lib. 1.

troduction, *Either my affection to the work I have undertaken deceives me, or there was never State more great, more religious, more richly furnish'd with good presidents, nor which avarice and riot conquered so late, nor where so great reverence to Poverty and Parcimony continued so long.* So likewise after the State of *Rome* was now degenerate, we read that when *Cæsar* the *Dictator* took upon him a Restauration of the collapsed state, one of his *confidents* gave him this counsel, That of all Points the most summary to such a designment, as he went about, was by all means to take away the estimation of wealth, *For* (saith he) *these and all other evils, together with the reputation of mony shall cease, if neither publique Officers nor any other Dignity, which commonly are so coveted, were exposed to sale.* To conclude this point, as it was truly said that *Rubor est virtutis Color*, though sometimes it come from vice; so you may truly say, *Paupertas est virtutis fortuna*, though sometimes it may proceed from misgovernment and improvidence. Surely this is *Solomons* Censure, *Qui festinat ad divitias non erit insons*, and Precept, *Buy the truth and sell it not*; So wisdom and knowledge judging it right and equal that means should be imployed to get Learning, and not Learning be applied to gather up means.

Præf. lib. 1.

Orat. ad C. Cæsar. Salust. im. Putata.

Laert. in Diog. Cyn.

Prov. 28.

Prov. 23.

§ To what purpose should we speak of the *privateness and obscureness of life*, which is objected to learned men? It is a Theme so common and so frequently handled by all, to extol *Leasure* and *retiredness*, not taxed with sensuality and sloth, before a Civil and Active life; for safety, liberty, sweetness, dignity, or at least freedom from indignities, as no man handles this subject, but handles it well: such a consonancy it hath to mens conceptions in the expressing; and to mens consent in the allowing. This only I will add, that Learned men forgotten in States, are like the Images of *Cassius* and *Brutus* in the funerals of *Junia*, of which, not to be represented as others were, *Tacitus* saith, *Eo ipso præfulgebant quod non visebantur.*

Annal. 3.

§ For *Meanness of imployment assigned to Learned men*, that which is most traduced to contempt is, That the government of childhood and youth is commonly allotted to them, the contempt of which age is transferred upon the Preceptors or Tutors. But how unjust this traducement is, if you will reduce things from popularity of opinion, to measure of reason, may appear in that we see men are more careful what they put into new vessels, than into a vessel season'd; and more curious what mould they lay about a young plant, than a plant corroborate: So as it is manifest that the weakest terms and times of all things, use to have the best applications and helps. Harken, if you please, to the Hebrew Rabbins, *Your young men shall see visions, your old men shall dream dreams*; from this Text they collect, that youth is the worthier age, by so much as Revelation is more clear by visions, than by dreams. And it is worth the noting that however *Pedants* have been the derision and scorn of *Theaters*, as the Apes of *Tyranny*, and that the modern looseness or negligence hath taken no due regard to the choice of *School-masters* and *Tutors*; yet it hath been an ancient complaint drawn down from the best and wisest times, even to our age, that States were too busie with their *Laws* and too negligent in point of *Education*. Which excellent part of Ancient Discipline hath been in some sort revived of late times *by the Colleges of the Jesuits*, whose pains and diligence

Joel 2.

gence when I conſider, as well in the culture of knowledge, as information of manners, the ſaying of *Ageſilaus* touching *Pharnabazus* comes into my mind, *Talis cum ſis utinam noſter eſſes.* And thus much concerning the diſcredits drawn from the *Fortunes and Condition of Learned men.* Plut. in Ageſil.

III. As touching the *Manners of Learned men*, it is a thing belonging rather to their individual Perſons, than their ſtudies and point of learning: No doubt there is found among them, as in all other Profeſſions, and Conditions of life, men of all temperatures, as well bad as good, but yet ſo, as it is not without truth that is ſaid, *abire ſtudia in mores*; and that Learning and Studies, unleſs they fall upon very depraved diſpoſitions, have an influence and operation upon the manners of thoſe that are converſant in them, to reform nature and change it to the better.

§ But upon an attentive and indifferent review, I for my part, can not find any diſgrace to learning can proceed from the *Manners of Learned men, adherent unto them as they are Learned*; unleſs peradventure it be a fault (which was the ſuppoſed fault of *Demoſthenes*, *Cicero*, *Cato* the *ſecond*, *Seneca*, and many more) that becauſe the times they read of, are commonly better, than the times they live in; and the duties taught, better than the duties practiſed; they *contend too far, to reduce the corruption of manners to the honeſty of precepts, and preſcripts, of a too great hight, and to impoſe the Laws of ancient ſeverity upon diſſolute times*: and yet they have Caveats enough touching this auſterity out of their own ſprings: For *Solon*, when he was asked *Whether he had given his Citizens the beſt laws? the beſt* (ſaid he) *of ſuch as they would receive.* So *Plato*, finding that his own heart conld not agree with the corrupt manners of his Country, refuſed to bear place or office, ſaying, *That a man's Country is to be uſed as his Parents were, that is, with perſwaſion and not with violence, by entreating and not by conteſting*: And *Cæſars* counſelor put in the ſame caveat, ſaying, *non ad vetera inſtituta revocans quæ jampridem corruptis moribus ludibrio ſunt*: And *Cicero* notes this error directly in *Cato* the *ſecond*, writing to his friend *Atticus*, *Cato optime ſentit ſed nocet interdum Reipub. loquitur enim tanquam in Republ. Platonis, non tanquam in fæce Romuli.* The ſame *Cicero* doth excuſe and expound the Philoſophers for going too far, and being too exact in their Preſcripts, *Theſe ſame Præceptors and Teachers*, (ſaith he) *ſeem to have ſtretched out the line and limits of Duties ſomewhat beyond the natural bounds, that when we had laboured to reach the higheſt point of Perfection, we might reſt where it was meet*: and yet himſelf might ſay, *Mentis ſum minor ipſe meis*; for he ſtumbled at the ſame ſtone, though in not ſo extreme a degree. Plut. in Solon. In vita. in epiſt. alibi. Orat. ad C. Cæſ. Saluſt. ad ſcripta. Ad Attic. l.b.2. ep.1. Pro L. Muræna.

§ Another fault which perchance not undeſervedly is objected againſt Learned men, is this, *that they have preferr'd the honour and profit of their Country, and Maſters before their own fortunes and ſafeties.* So *Demoſthenes* to his Athenians, *My Counſels* (ſaith he) *if you please to note it, are not ſuch whereby I ſhould grow great amongſt you, you become little amongſt the Grecians; but they be of that nature as are ſometimes not good for me to give, but are always good for you to follow.* So *Seneca* after he had conſecrated that *Quinquennium Neronis* to the eternal glory of Learned Governors, held on his honeſt and loyal courſe of Good Oration de Corona.

and

and Free Counſel, after his Maſter grew extremely corrupt to his great peril and at laſt to his ruine. Neither can it be otherwiſe conceived; for Learning endues mens minds with a true ſenſe of the frailty of their Perſons; the Caſualty of fortune; the Dignity of the ſoul; and their vocation: which when they think of, they can by no means perſwade themſelves that any *advancement of their own fortunes*, can be ſet down as a true and worthy end of their being and ordainment. Wherefore they ſo live, as ever ready to give their account to God, and to their Maſters under God, whether they be Kings or States they ſerve, in this
Mat. 25. ſtile of words, *Ecce tibi Lucrifeci*, and not in that *Ecce mihi Lucrifeci.* But the corrupter ſort of Politiques, that have not their minds inſtituted and eſtabliſh'd in the true apprehenſion of Duties, and the contemplation of good in the univerſality, *refer all things to themſelves*, as if they were the *worlds Center*, and that the *concurrence of all lines ſhould touch in them and their fortunes*; never caring in all tempeſts, what becomes of the Ship, ſo they may retire and ſave themſelves in the Cock-boat of their own fortune. On the contrary, they that feel the waight of Duty, and underſtand the limits of ſelf love: uſe to make good their places, and duties, though with peril: and if they chance to ſtand ſafe in ſeditions and alterations of times and Government, it is rather to be attributed to the reverence which honeſty even wreſteth from adverſaries, than any *verſatile or temporizing advantage in their own carriage.* But for this point of tender ſenſe, and faſt obligation of duty, which without doubt Learning doth implant in the mind, however it may be taxed and amerced by Fortune; and be deſpiſed by Politiques in the depth of their corrupt principles, as a weak and improvident virtue, yet it will receive an open allowance, ſo as in this matter there needs the leſs diſproof or excuſation.

§ Another fault there is incident to Learned men, which may ſooner be excuſed than denied, namely this; *That they do not eaſily apply and accommodate themſelves to perſons with whom they negociate and live:* which want of exact application ariſeth from two cauſes; *The firſt is, the largeneſs and greatneſs of their minds, which can hardly ſtoop and be confined within the obſervation of the nature and cuſtom of one perſon.* It is the
Seneca. ſpeech of a Lover, not of a wiſe man, *Satis magnum alter alteri theatrum ſumus.* Nevertheleſs I ſhall yield that he that cannot contract the light of his mind, as he doth the eye of his body, as well as diſperſe and dilate it, wants a great faculty for an active courſe of life. *The ſecond cauſe is the honeſty and integrity of their nature*, which argueth no inhability in them, but a choice upon judgement; for the true and juſt limits of obſervance towards any perſon extend no farther, than ſo to underſtand his inclination and diſpoſition, as to converſe with him without offence; or to be able, if occaſion be offered, to give him faithful counſel, and yet to ſtand upon reaſonable guard and caution, in reſpect of our ſelves: but to be ſpeculative into others, and to feel out a mans diſpoſition, to the end to know how to work him, winde him and govern him at pleaſure; is not the part of an ingenious nature, but rather of a heart double and cloven; which, as in friendſhip, it is want of integrity, ſo towards Princes and Superiours it is want of Duty. For the Cuſtom of the *Levant*, whereby it was accounted a hainous offence, to gaze and fix their eyes upon Princes, is indeed, in the outward ceremony

mony, barbarous, but good in the moral; for it becomes not Subjects by bent and inquisitive observations, to penetrate into the *hearts of Kings*, which the Scripture hath declared to be *inscrutable*. Prov. 25.

§ There is yet another fault with which I will conclude this Part, which is often noted in Learned men; namely, *that in small and outward matters of behaviour and carriage* (as in countenance, gesture, march, ordinary discourse, and the like) *they do many times fail to observe decency and direction*; so as the vulgar sort of capacities make a judgement of them in greater matters, by that which they find wanting in small and ordinary points of Action. But this prejudication doth oftentimes deceive them: nay let them know, they have their answer from *Themistocles*, who being invited to touch a Lute, said, arrogantly enough, being applyed to himself, but pertinently to the purpose in hand, *That he could not indeed fiddle, but he knew how to make a small Town, a great State.* And there are, no doubt, many well seen in the Arts of Government, and Policy, which are to seek in ordinary conversation and punctual occasions. I refer such scoffers to the Elogie *Alcibiades* gave of his Master *Socrates*, whom he compar'd to the *Gallipots of the Apothecaries, which on the outside were drawn with Apes, Owls, and Antiques, but contained within precious liquors and soveraign confections*; acknowledging that to vulgar capacity and popular report, he was not without some superficial levites, and deformities, but was inwardly repleniſht with excellent powers and virtues. And so much touching the Point *of Manners of learned men.* Plut. in Themist. Plato Conv.

§ In the mean time I thought good to advertise, that I have no purpose to give allowance to some *base and unworthy Conditions of some Professors*, whereby they have discredited both Themselves and Learning: such were those *trencher Philosophers*, which in the later age of the Roman state; were usually in the houses of great Persons, whom not improperly you may call *solemn Parasites*: of which kind *Lucian* makes a merry discription of the Philosopher, that the great Lady took to ride with her in the Coach, and would needs have him carry her little Dog *Melitæus*; which he doing officiously and yet uncomely, the Page scoffing said, *I doubt our Philosopher of a Stoick will turn Cynique.* But above all the rest, the gross and palpable flattery whereunto many not unlearned have abased and abused their wits and pens, turning as *Du Bartas* saith *Hecuba* into *Helena*, and *Faustina* into *Lucretia*, hath diminisht the prize and estimation of Learning. De Merc. conduct.

§ Neither is the *Modern Dedication of Books to Patrons to be Commended*: for that Books, such as are worthy the name of Books, ought to have no *Patron* but *Truth* and *Reason*. The custom of the Ancients was better, who were wont to *dedicate their writings only to private and equal friends*, or to entitle the Books with the names of such friends; or if they Dedicated their Books to Kings or great Persons, it was to some such as the Argument of the Book was fit and proper for. These and the like Courses may deserve rather apprehension than defence.

§ Nor say I this, as if I condemned the *Aberigeration and application of Learned men, to men in fortune and place*; for the answer was good that *Aristippus* made to one that askt him in mockery, *How it came to pass that Philosophers were followers of Rich men, and not Rich men of Philosophers?* Laert. in Aristip.

ſophers? He anſwered ſoberly and yet ſharply, *That it was becauſe Philoſophers knew well what they had need of, but Rich men did not.* Of like nature was the anſwer which the ſame Philoſopher made when having a Petition to *Dionyſius* and no ear given to him *he fell down at his feet in manner of a Worſhipper, whereupon* Dionyſius *ſtaid and gave him the hearing, and granted it:* but a little after, ſome perſon tender of the honour and credit of Philoſophy, *reproved Ariſtippus that he would offer the Profeſſion of Philoſophy ſuch an indignity as for a private ſuit to fall to a Tyrants feet?* to whom he replyed; *That was not his fault, but it was the fault of* Dionyſius *that had his ears in his feet.* Neither was it accounted weakneſs, but a diſcretion in him that would not diſpute his beſt with *Adrianus Cæſar*, excuſing the fact, *That it was reaſon to yield to him that commanded thirty Legions:* Theſe and ſuch like *applications and ſtoopings of Learned men below the terms of Gravity*, at the command of neceſſity or the advantage of occaſion, cannot be condemned; for though they may ſeem, at firſt ſight, ſomewat baſe and ſervile, yet in a judgement truly made, they are to be accounted *ſubmiſſions* to the *Occaſion* and not the *Perſon.*

Ibid.

Spartian. in Hadrian.

CHAP. IV.

I. *Diſtempers of Learning from* Learned mens ſtudies, *are of three ſorts.* Phantaſtical Learning, Contentious Learning, Delicate Learning. II. Delicate Learning, *a Curioſity in words through Profuſeneſs of ſpeech.* § *Decent expreſſion commended.* § *Affected Brevity cenſured.* III. Contentious Learning, *a Curioſity in matter, through the novelty of terms, or ſtrictneſs of Poſitions.* § *A vanity either in Matter or in Method.* IV. Phantaſtical Learning *hath two branches,* Impoſture, Credulity. § *Credulity is a belief of Hiſtory.* § *Or a belief of Art or Opinion;* *and that either Real in the Art it ſelf.* § *Or Perſonal in the Author of ſuch an Art, or Science.*

LEt us now proceed to thoſe *Errors, and Vanities, which have intervened amongſt the ſtudies of Learned men, and therewith are intermingled*; which is the principal point and proper to the preſent Argument; wherein my purpoſe is not to patronize errors, but by a Cenſure and ſeparation of the errors, to ſift out that which is ſound and ſolid, and to deliver the ſame from aſperſion. For we ſee it is the manner of men, eſpecially of envious perſons, to ſcandalize, and deprave that which retains the State and Virtue, by taking advantage upon that which is corrupt and degenerate; as the Heathens in the Primitive Church us'd to blemiſh and taint the Chriſtians, with the faults and corruptions of Heretiques: Nevertheleſs I have no meaning to make any exact animadverſion of the *Errors*, and *Impediments in matters of Learning*, which are more ſecret and remote from vulgar opinion, but only to ſpeak of ſuch as do fall under a common and popular obſervation, and known, or at leaſt, which recede not far of therefrom.

I. I find

I. I find therefore chiefly three vanites, and vacuities in Learning, which have given occaſion to the reproach and diſgrace thereof. For *thoſe things* are eſteemed *vain* which are either *falſe*, or *frivolous*; namely, wherein there is, either no truth, or no uſe: *thoſe Perſons* we eſteem vain, which are either *Credulous* in things falſe, or *Curious* in things of little uſe. And *Curioſity* is either in *matter* or in *words*; that is when either labour is ſpent in *vain matters*, or time is waſted in the delicacy of *fine words*: ſo that it is agreeable as well to true reaſon as approved experience, to ſet down three diſtempers of Learning: The firſt is *Phantaſtical Learning*; The ſecond *Contentious Learning*; The third *Painted* and *Delicate Learning*: or thus, *vain Imaginations*, *vain Altercations*, *vain affectations*. And with the laſt I will begin.

II. This Diſtemper ſeated in the *ſuperfluity and profuſeneſs of ſpeech* (though in times paſt by turns, it was in ſome price) about *Luthers* time, got up mightily into credit, and eſtimation. The heat and efficacy of Preaching, to win and draw on the people, began chiefly about that time to flouriſh; and this required a popular kind of expreſſion. This was furthered by the Enmity and Oppoſition conceived in that ſame age againſt the *School-men*; whoſe writings were altogether in a differing ſtile and form of expreſſion; taking liberty to coyn and frame new and rude terms of Art, without any regard to the pureneſs and elegancy of ſpeech, ſo they might avoid circuit of words, and deliver their ſenſe and conceptions, in a preciſe exact expreſſion: and ſo it came to paſs a little after, that a greater care was taken for Words, than Matter; and many affected rather Comptneſs of ſtile; a round and clean Period; the ſweet falling of the clauſes; and illuſtrations by Tropes and Figures; than the waight of Matter, ſoundneſs of Argument, life of Invention, or depth of Judgment. Then ſprang up the *flowing and watery vein of Oſorius*, the Portugal Biſhop, to be in price and requeſt: Then did *Sturmius* ſpend ſuch infinite and curious pains upon *Cicero* the Orator, and *Hermogenes* the Rhetorician. Then did our *Carre* and *Aſcham* in their Lectures and Writings almoſt Deifie *Cicero*, and *Demoſthenes*, and allure young Students to that poliſht and flouriſhing kind of Learning. Then did *Eraſmus* take occaſion to make that ſcoffing kind of Eccho, *Decem annos conſumpſi in Legendo Cicerone*, to which the Echo anſwered, *One, Aſine*. Then grew the Learning of the Schoolmen to be utterly deſpiſed, as rude and barbarous. In ſum, the whole inclination and bent of thoſe times was, rather about *Copy* than *Weight*. Here we ſee the firſt *Diſtemper of Learning*, when, as we have ſaid, *men ſtudy Words and not Matter*. Whereof though I have repreſented examples of late times only, yet ſuch vanities have been accepted, in ſome degree or other, in ancient times, and will be ſo hereafter. Now it is not poſſible but that this ſhould have an operation to diſcredit and debaſe the reputation of Learning, even with vulgar capacities; when they ſee Learned mens Works, like the firſt letter of a Patent, which though it be limmed and ſet out with large flouriſhes, yet it is but a letter. And it ſeems to me that *Pigmalions frenzie* is a good Emblem and Portraicture of this vanity; for what are words but the Images of matter, and except they be animated with the ſpirit of reaſon, to fall in Love with them, is all one as to fall in love with a Picture.

§. But yet notwithſtanding it is a thing not haſtily to be condemned to illuſtrate and poliſh the obſcurity and roughneſs of Philoſophy, with the *ſplendor of words* and *ſenſible elocution*, For hereof we have great examples in *Xenophon*, *Cicero*, *Seneca*, *Plutarch*, and even in *Plato* himſelf; and the uſe hereof is great: For though to the ſevere inquiſition of Truth, and the deep progreſs into Philoſophy, it is ſome hinderance, becauſe it is too early ſatisfactory unto the mind, and quencheth the thirſt and deſire of farther ſearch; yet if a man be to have any uſe of ſuch knowledge in Civil occaſions (of *Conference*, *Counſel*, *Perſwaſion*, *Diſcourſe*, *and the like*) he ſhall find all that he deſireth prepar'd and ſet out to his hand in thoſe Auctors. But the exceſs of this is ſo juſtly contemptible, that, as *Hercules*, when he ſaw the Image of *Adonis*, *Venus minion*, in the Temple, ſaid, *nil ſacri es*; ſo there is none of *Hercules* his followers in Learning, I mean, the more induſtrious and ſevere inquirers into Truth, but will deſpiſe thoſe *Delicacies* and *Affectations*, as indeed capable of no Divineneſs.

§ Little better is that kind of ſtile (yet neither is that altogether exempt from vanity) which neer about the ſame time ſucceeded this *Copy* and *ſuperfluity of ſpeech*. The labour here is altogether, *That words may be aculeate, ſentences conciſe, and the whole contexture of the ſpeech and diſcourſe, rather rounding into it ſelf, than ſpread and dilated:* So that it comes to paſs by this Artifice, that evey paſſage ſeems more witty and weighty than indeed it is. Such a ſtile as this we find more exceſſively in *Seneca*; more moderately in *Tacitus* and *Plinius Secundus*; and of late it hath been very pleaſing unto the ears of our time. And this kind of expreſſion hath found ſuch acceptance with meaner capacities, as to be a dignity and ornament to Learning; nevertheleſs, by the more exact judgments, it hath been deſervedly deſpiſed, and may be ſet down *as a diſtemper of Learning*, ſeeing it is nothing elſe but a hunting after words, and fine placing of them. And thus much of the firſt *Diſeaſe* or *Diſtemper* of Learning.

III. Now followes the diſtemper *ſetled in Matter*, which we ſet down as a *ſecond diſeaſe of Learning*, and have deſigned it by the name of *contentious ſubtilty*; and this is in nature ſomewhat worſe than that whereof we ſpake even now. For as the ſubſtance of Matter, is better than the beauty of words; ſo on the contrary, *vanity of Matter* is more odious than *vanity of words*. Wherein it ſeemeth that the reprehenſion of St. *Paul* was not only proper for thoſe times, but Prophetical for the times following; and not only reſpective to Divinity, but extenſive
1. Tim. 6. to all knowledge, *Devita prophanas vocum novitates:* For in theſe words he aſſigns two Markes and Badges of ſuſpected and falſified ſcience; The firſt is the *Novelty* and *Strangeneſs of Terms*; The other, the *ſtrictneſs of Poſitions*; which of neceſſity induce oppoſition and ſo Alterations and Queſtions. Certainly like as many ſubſtances in nature, which are ſolid and entire, doe many times putrifie and corrupt into worms; ſo good and ſound Knowledge doth often putrifie and diſſolve into a number of ſubtle, idle, unwholſome, and (as I may terme them) *vermiculate* Queſtions, which ſeem indeed to have a kind of Motion and Quickneſs in them, and yet they are unſound and hollow, and of no ſolid uſe. This kind of *Degenerate Learning* corrupting it ſelf, did chiefly reign amongſt the *Schoolmen*; who having abundance

of

of Leiſure, ſharp, and ſtrong wits, and ſmall variety of reading, (for their wits were ſhut up within the writing of a few Authors, chiefly *Ariſtotle*, their Dictator, as their Perſons were ſhut up in the cells of Monaſteries and Colleges) and for moſt part ignorant of the Hiſtory either of Nature, or of Time, did out of no great Quantity of Matter, but infinite agitation of their Wit and Phancy, as of the ſpindle, ſpin out unto us thoſe laborious webs of Learning, which are extant in their Books. For the Wit and Mind of Man, if it work upon Matter, by contemplating Nature and the Works of God, worketh according to the ſtuff, and is limited thereby; but if it worketh upon it ſelf, as the *ſpider works his web*, then it is endleſs, and brings forth *Cobwebs of Learning*, indeed admirable for fineneſs of thred and work, but of no Subſtance and Profit.

§ This ſame unprofitable *ſubtilty* or *Curioſity*, is of two ſorts; and it is diſcerned either in the ſubject and *Matter* it ſelf, ſuch as is fruitleſs *Speculation* or *Controverſie*, whereof there are no ſmall number, both in Divinity and Philoſophy; Or in the *Manner* and *Method of handling*, which amongſt School-men was this; Upon every Poſition or Aſſertion they framed objections, then ſolutions of thoſe objections, which ſolutions, for the moſt part, were only diſtinctions, whereas indeed, the ſtrength of all ſciences, *like the Old mans Fagot*, conſiſteth not in every ſtick aſunder, but in them all together united in the band. For the *Harmony of ſciences*, that is when each part ſupports the other, is and ought to be the true and brief way of confutation and ſuppreſſion of all the ſmaller ſort of objections: but on the other ſide, if you draw out every Axiom, as the ſticks of a Fagot, one by one, you may eaſily quarrel with them, and bend and break them at your pleaſure. So that as it was ſaid of *Seneca*, *verborum Minutiis rerum frangit pondera*, may truly be ſaid of the School-men, *Quæſtionum Minutiis ſcientiarum frangunt pondera*. For were it not better for a man, in a fair room to ſet up one great light, or branching candleſtick of lights, whereby all may be ſeen at once, than to go up and down with a ſmall watch candle into ever corner? And ſuch is their *Method*, that reſteth not ſo much upon evidence of Truth proved by Arguments, Authorities, Similitudes and Examples; as upon particular Confutations, and Solutions of every ſcruple, cavillation, and objection; thus breeding queſtion upon queſtion; even as in the former reſemblance, *when you carry the light into one corner, you darken the reſt*. So that the *fable* of *Scylla* ſeems to be a lively image of this kind of Philoſophy or knowledge, which for the upper part had the ſhape of a comely Virgin, but below, *Candida ſuccinctam latrantibus inguina monſtris*; So you ſhall find ſome generalities of the School-men, fair and well proportioned, and invented to ſome good purpoſe; but then when you deſcend to diſtinctions and deciſions, in ſtead of a fruitful womb for the uſe and benefit of mans life, they end in monſtrous and barking *Queſtions*. Wherefore it is no marvail, if this quality of Knowledege fall under, even popular contempt, the people being apt to contemn Truth upon occaſion of Controverſies, and altercations; and to think they are all out of their way, which never meet and agree among themſelves; and when they ſee the digladiations of Learned men, about matters of no uſe or moment, they eaſily fall upon that judgement of *Dionyſius* of Syracuſa, *verba iſta ſunt*

Æſop. Fab. Plut. Mor.

Fabian. Quæſtiſt. X.

Virg. Buc. Ecl 6.

Laertius in Plato. *genum otioſorum.* Notwithſtanding it is moſt certain, that if the Schoolmen, to their great thirſt of Truth, and unwearied travail of wit, had joyn'd variety, and univerſality of reading, and contemplation, they had certainly proved excellent lights to the great *advancement of all Arts and Sciences.* And thus much of the ſecond Diſeaſe of Learning.

IV. For the third Diſeaſe of Learning which concerns *Deceit or Untruth*, it is of all the reſt the fouleſt, as that which doth deſtroy the Nature and eſſential form of Knowledge, which is nothing but a repreſentation of Truth. For the *Truth of Being*, and the *Truth of Knowing* are all one, differing no more than the direct beam, and the beam reflected. This vice therefore brancheth it ſelf into two ſorts, *Impoſture* and *Credulity*; the one deceives, the other is deceived; which although they appear to be of a diverſe nature; the one ſeeming to proceed of Cunning, and the other of Simplicity; yet for the moſt part they do concur, for as the verſe noteth,

Horat. Epi. *Percontatorem fugito nam garrulus idem eſt:*

Intimating that an *Inquiſitive man is a Pratler*; ſo upon the like reaſon, a *Credulous man is a deceiver.* As we ſee it in Fame and Rumors, that he that will eaſily believe Rumors, will as eaſily augment Rumors; which *Tacitus* wiſely notes in theſe words, *Fingunt ſimul creduntq;* ſuch affinity there is between a propenſity to *Deceive* and a facility to *Believe.*

Tacit. Hiſt. l. 1.

§ This *facility of Crediting* and accepting all things, though weakly authorized, is of two kinds, according to the nature of the Matter handled, for it is either *belief of Hiſtory*, or (as the Lawyers ſpeak) *matter of Fact*, or *matter of Opinion.* In the former kind, we ſee with what loſs and detriment of Credit and Reputation, this error hath diſtain'd and embaſed much of the *Eccleſiaſtical Hiſtory*, which hath two eaſily received and regiſtred Reports and Narrations of Miracles wrought by Martyrs, Hermites, or Monks of the Deſert, Anchorites, and other holy men; and of their Reliques, Sepulchers, Chappels, Images and Shrines. So in *Natural Hiſtory*, we ſee many things have been raſhly, and with little choice or judgement received and regiſtred, as may appear in the writings of *Plinius*, *Cardanus*, *Albertus*, and diverſe of the *Arabians*, which are every where fraught with forged and fabulous Reports, and thoſe not only uncertain and untried; but notoriouſly untrue and manifeſtly convicted, to the great derogation of *Natural Philoſophy* with grave and ſober men. Wherein in truth the wiſdom and integrity of *Ariſtotle* doth excellently appear, that having made ſo diligent and exquiſite a *Hiſtory of living Creatures*, hath mingled it ſo ſparingly with any vain or feigned matter; but hath rather caſt all *Prodigious Reports*, which he thought worthy the recording into one *commentary*; wiſely diſcerning that matter of manifeſt Truth (which might be the experimental ground-work whereupon Philoſophy and Sciences were to be built) ought not unadviſedly, to be mingled with matter of doubtful faith: and yet again things rare and ſtrange, which to many ſeem incredible, are not wholly to be ſuppreſſed or denyed to be recorded to Poſterity.

De Mirab. Auſcult.

But

§ But that other *Facility of Credit*, which is yielded, not to *Hiſtory* and *Reports*, but to *Arts* and *Opinions*, is likewiſe of two ſorts; either when too much belief is attributed to *Arts* themſelves, or to certain *Authors* in any Art. The Sciences themſelves, which hold more of the fancy and of belief, than of Reaſon and Demonſtration, are chiefly three *Aſtrologie*, *Natural Magique* and *Alchimy*; of which Sciences nevertheleſs the end and pretences are noble; For *Aſtrology* profeſſeth to diſcover the influence and domination of the ſuperiour Globe, over the inferiour: *Magique* propoſeth to it ſelf to call and reduce Natural Philoſophy from variety of ſpeculations, to the magnitude of works: *Alchimy* undertakes to make a ſeparation and extraction of all heterogeneous and unlike parts of bodies, which in mixture of Nature are Implicate and Incorporate; and to refine and depurate bodies themſelves, that are diſtained and ſoiled; to ſet at liberty ſuch as are bound and impriſoned; and to bring to perfection ſuch as are unripe. But the derivations and proſecutions, which are preſumed to conduce to theſe ends, both in the Theory and in the Practiſe of *theſe Arts*, are full of *Errors* and *Vanity*. Nor is the Tradition and manner of Delivery for moſt part ingenious and without ſuſpition, but vail'd over and munited with deviſes and impoſtures. Yet ſurely to *Alchimy* this right is due, that it may truly be compared to the Husbandman whereof *Æſope* makes the Fable, *that when he died, told his ſons he had left unto them a great maſs of Gold buried under ground in his Vineyard, but did not remember the particular place where it was hidden*; who when they had with ſpades turn'd up all the Vineyard; gold indeed they found none; but by reaſon of their ſtirring and digging the Mold about the Roots of their Vines, they had a great Vintage the year following: ſo the painful ſearch and ſtir of *Alchimiſts* to make Gold, hath brought to light a great number of good and fruitful experiments, as well for the diſcloſing of nature, as the uſe of mans life.

§ As for the *overmuch Credit that hath been given to Authors in Sciences, whom they have inveſted with the power of Dictators, that their words ſhould ſtand, and not of Conſuls to give advice*; the damage is infinite that Sciences have received thereby, as a Principal cauſe that hath kept them low at a ſtay, and that they have lien heartleſs, without any notable *Groweth or Advancement*. For hence it hath come to paſs, that in *Arts Mechanical*, the firſt deviſer cometh ſhort, and time ſupplies and perfects the reſt; but in *Sciences*, the firſt Author goeth fartheſt, and time looſeth and corrupteth. So we ſee *Artillery*, *Sailing*, *Printing*, were imperfect, formleſs, and groſly managed at firſt, but in progreſs of time accommodated and refined. But contrariwiſe the *Philoſophy* and *Sciences* of *Ariſtotle*, *Plato*, *Democritus*, *Hypocrates*, *Euclide*, *Archimedes*, were of moſt vigor in their Authors, and in proceſs of time, became rather degenerate and embaſed, and loſt much of their luſtre; whereof the reaſon is no other, but that in *Arts Mechanical*, *many wits and induſtries have contributed in one, in liberal Arts and Sciences, many wits and induſtries have been ſpent about, and yielded to the art of ſome one*; whom (notwithſtanding many times) his ſectators have rather depraved than illuſtrated. *For as water* will not aſcend higher than the level of the firſt ſpring-head, from whence it deſcendeth; ſo knowledge derived from *Ariſtotle*, will never riſe higher than the knowledge of *Ariſtotle*.

Aristot. de Rep. Soph. lib. 1.

Aristotle. And therefore although the position be good, *Oportet discentem credere*, yet it must be coupled with this, *Oportet jam edoctum judicio suo uti.* For Disciples owe unto Masters, only a *temporary belief*, and a suspension of their judgment, until they be fully instructed, and not an absolute resignation of their liberty, and a perpetual captivity of their judgements. Therefore, to conclude this point, I will say no more but this. *Let great Authors so have their due, as we do not derogate from Time, which is the Author of Authors and Parent of Truth.*

Chap. V.

Peccant Humours in Learning. I. *Extreme affection to two extremes, Antiquity, Novelty.* II. *A distrust, that any thing New, should now be found out.* III. *That of all Sects and Opinions, the best hath still prevailed.* IV. *An over early reduction of Knowledge into Arts and Methods.* V. *A neglect of* Primitive Philosophy. VI. *A Divorce of the Intellect from the Object.* VII. *Infection of Knowledge in general from individual inclinations.* VIII. *An impatience of Doubt, hast to Assertion.* IX. *A Magistral manner of Tradition of Knowledge.* X. *Aim of writers, Illustration, not Propagation of Knowledge.* XI. *End of studies, Curiosity, Pleasures, Profit, Preferments,* &c.

THus have we at length gone over three Distempers or Diseases of Learning; besides the which, there are other, rather *peccant Humours*, than *confirmed Diseases*, which nevertheless are not so secret and intrinsique, but that they fall under a popular sense and reprehension, and therefore are not to be passed over.

I. The first of these is an *extreme affection of two extremities, Antiquity and Novelty*; wherein the daughters of *Time*, do take after the Father; for as Time devoureth his children, so these, one of them seeketh to depress the other; while *Antiquity* envieth there should be *new Additions*; and *Novelty* can not be content to add things *recent*, but it must deface and reject the *old*. Surely the advice of the Prophet is the true direction in this case, *State super vias antiquas & videte quænam sit via recta & bona & ambulate in ea.* *Antiquity* deserveth that reverence, that men should make a stay a while, and stand thereupon, and look about to discover which is the best way; but when the discovery is well taken, then not to rest there, but cheerfully to make progression. Indeed to speak truly, *Antiquitas seculi, Juventus Mundi*, Certainly our times are the Ancient times, when the world is now Ancient, and not those which we count Ancient, *ordine retrogrado*, by a computation backward from our own times.

Jerem. 6.

II. An other error induced by the former is, *a suspition and diffidence, that any thing should be now to be found out, which the world should have missed and past over so long time:* as if the same objection might be made to *Time*, wherewith *Lucian* reproacheth *Jupiter*, and other the Hea-

Sen. ait Lact. Inst. lib. 1.

then

then Gods, *For he wonders that they begat ſo many children in old time, and begot none in his time?* and asks in ſcoffing manner, *whether they were now become Septuagenary, or whether the Law Papia; made againſt old mens marriages, had reſtrained them?* So it ſeems men doubt leaſt time is become paſt children and generation. Nay rather the levity and inconſtancy of mens judgements, is hence plainly diſcovered, which until a matter be done, wonder it can be done. So *Alexander*'s expedition into *Aſia* was prejudg'd as a vaſt impoſſible enterprize; yet afterwards it pleaſed *Livie*, ſo to ſlight it as to ſay of *Alexander*, *Nil aliud quam bene auſus eſt vana contemnere:* The ſame hapned unto *Columbus* in the weſtern Navigation. But in intellectual matters it is much more common, as may be ſeen in many propoſitions in *Euclid*, which till they be demonſtrate, they ſeem ſtrange to our aſſent; but being Demonſtrate, our mind accepteth of them by a kind of Recogniſance or Retractation (as the Lawyers ſpeak) as if we had underſtood and known them before. Hiſt. lib. 9.

III. Another error which hath ſome affinity with the former is, *a conceit That all ſects and ancient opinions, after they have been diſcuſſed and ventilated; the beſt ſtill prevail'd and ſuppreſt the reſt:* Wherefore they think that if a man ſhould begin the labour of a new ſearch and examination, he muſt needs light upon ſomewhat formerly rejected, and after rejection, loſt, and brought into oblivion: as if the *multitude*, or the wiſeſt, to gratifie the *multitude*, were not more ready to give paſſage to that which is popular and ſuperficial; than to that which is ſubſtantial and profound. *For Time* ſeemeth to be of the nature of a River, which carrieth down to us that which is light and blown up, and ſinketh and drowneth that which is waighty and ſolid.

IV. Another error of divers nature from the former is, *The over-early and Peremptory reduction of Knowledge into Arts and Methods; which once done, commonly Sciences receive ſmall or no augmentation.* For as young men, when they knit and ſhape perfectly, do ſeldom grow to a farther ſtature: ſo knowledge while it is diſperſt into *Aphoriſms*, and *Obſervations*, may grow and ſhoot up; but once incloſed and comprehended in Methods, it may perchance be farther poliſht and illuſtrate, and accommodated for uſe and practice, but it increaſeth no more in bulk and ſubſtance.

V. Another error which doth ſucceed that which we laſt noted, is, *That after diſtribution of particular Arts and Sciences into their ſeveral places, many men have preſently abandoned the univerſal notion of things,* or Philoſophia Prima, *which is a deadly enemy to all Progreſſion.* Proſpects are made from Turrets and high places; and it is impoſſible to diſcover the more remote and deeper parts of any Science, if you ſtand but upon the flat and level of the ſame Science, and aſcend not as into a watch-Town to a higher Science.

VI. Another error hath proceeded *from too great a reverence, and a kind of Adoration of the mind and underſtanding of man, by means whereof men have withdrawn themſelves, too much, from the contemplation of Nature, and the obſervations of experience; and have tumbled up and down in their own ſpeculations and conceits;* bur of theſe ſurpaſſing *Opinators*, and (if I may ſo ſpeak) *Intellectualiſts*, (which are notwithſtanding, taken for the moſt ſublime and divine Philoſophers) *Heraclitus* gave a

juſt

N. I. juſt cenſure, ſaying, *Men ſeek truth in their own little world, and not in the great common world*, for they diſdain the Alphabet of nature, and *Primer-Book* of the Divine works; which if they did not, they might perchance by degrees and leaſure, after the knowledge of ſimple letters, and ſpelling of Syllables, come at laſt, to read perfectly the Text and Volume of the Creatures. But they, contrariwiſe, by continual meditation and agitation of wit, urge, and as it were invocate their own ſpirits to divine, and give *Oracles* unto them, whereby they are deſervedly and pleaſingly deluded.

VII. Another Error, that hath ſome connexion with this latter, is, *That men do oftentimes imbue and infect their meditations and doctrines with the infuſions of ſome Opinions, and conceptions of their own, which they have moſt admired; or ſome Sciences to which have moſt applyed and conſecrated themſelves, giving all things a Dye and Tincture, though very deceivable, from theſe favorite Studies.* So hath *Plato* intermingled his Philoſophy with Theology; *Ariſtotle* with Logick; The ſecond School of *Plato*, *Proclus* and the reſt, with the Mathematicks. Theſe Arts had a kind of *Primo-geniture* with them, which they would ſtill be kiſſing and making much of, as their firſt born ſons. But the *Alchimiſts* have forged a new Philoſophy out of the Fire and Furnace; and *Gilbert* our Country-man, hath extracted another Philoſophy out of a Load-ſtone. So *Cicero*, when reciting the ſeveral opinions of the nature of the ſoul, he found a Muſitian that held the ſoul was but a harmony, ſaith pleaſantly, *Hic ab arte ſua non receſſit:* But of theſe errors *Ariſtotle* ſaith aptly and wiſely, *Qui reſpiciunt ad pauca de facili pronunciant.*

Tuſc. lib. 1.

De Gen. & Cor. lib. 1. & alibi.

VIII. Another error is, *An impatience of Doubt, and an unadviſed haſte to Aſſertion without due and mature ſuſpenſion of judgement:* For the two ways of contemplation are not unlike the two ways of action, commonly ſpoken of by the Ancients; of which the one was a plain and ſmooth way in the beginning, but in the end impaſſible; the other rough and troubleſome in the entrance, but after a while fair and even; ſo is it in contemplations, if a man will begin in certainties, he ſhall end in doubts; but if he can be content to begin with doubts, and have patience a while, he ſhall end in certanties.

IX. The like error diſcovereth it ſelf in the *manner of Tradition and Delivery of knowlege, which is, for the moſt part, imperious and magiſtral, not ingenious and faithfull; ſo contrived, as may rather command our aſſent, than ſtand to examination.* It is true that in compendious Treatiſes deſigned for Practice, that Form of Writing may be retained; but in a juſt and compleat handling of knowledge, both extremes are to be avoided, as well the vein of *Vellieus* the Epicurean, *who feared nothing ſo much as to ſeem to doubt of any thing*; as that of *Socrates* and the Academy, leaving all things in doubt and incertainty: Rather men ſhould affect candor and ſincerity, propounding things with more or leſs aſſeveration, as they ſtand in their judgement proved, more or leſs.

Cic. de Nat. Dier. lib.

X. Other errors there are *in the ſcope that men propound to themſelves whereunto they bend their endeavours and ſtudies:* For whereas the moſt devout Leaders and noted Profeſſors of Learning, ought chiefly to propound to themſelves to make ſome notable addition to the Science

they

they profeſs; contrariwiſe, they convert their labours to aſpire to certain ſecond prizes, as to be a *profound interpreter*, or commentator; a ſharp and ſtrong champion or *Defender*; a Methodical compounder or *Abridger*: ſo the Revenues and Tributes of Sciences come to be improved, but not the Patrimony and Inheritance.

XI. But the greateſt error of all the reſt is, *the miſtaking or miſplacing the laſt and fartheſt end of knowledge*: For many have entred into a deſire of Learning and Knowledge, ſome upon an inbred and reſtleſs *Curioſity*; others to entertain their minds with variety and *delight*; others for *ornament and reputation*; others for *contradiction* and victory in diſpute; others for *Lucre* and living; few to improve the gift of reaſon given them from God, to the benefit and uſe of men. As if there were ſought in knowledge, a *couch*, whereupon to reſt a reſtleſs and ſearching ſpirit, or a *Tarraſs* for a wandring and variable mind to walk up and down in at liberty unreſtrained; or ſome high and eminent *Tower of State*, from which a proud and ambitious mind, may have a Proſpect; or a *Fort* and commanding ground for ſtrife and contention; or a *ſhop* for profit and ſale; and not rather a *rich ſtore-houſe and Armory* for the glory of the Creator of all things, and the relief of mans eſtate. For this is that which indeed would dignifie and exalt Learning; if contemplation and action were more nearly and ſtraitly, than hitherto they have been conjoyn'd and united together: which combination, certainly would be like unto that conjunction of the two higheſt Planets, when *Saturn* which hath the Dominion over reſt and contemplations, conſpires with *Jupiter* the Lord of Civil ſociety and Action. Howbeit I do not mean when I ſpeak of Uſe and Action, Profeſſory or Lucretive Learning, for I am not ignorant how much that diverts and interrupteth the *Progreſſion and advancement of knowledge*; like indeed the *Golden apple*, thrown before *Atalanta*, which while ſhe goes aſide and ſtoopeth to take up, the race is hindred.

Declinat curſus aurumq; volubile tollit. Ovid. Met. 10.

Neither is it my meaning, as was ſpoken of *Socrates*, to call Philoſophy down from heaven, to converſe upon the earth; that is to lay *Natural Philoſophy* aſide, and to celebrate only *Moral Philoſophy* and *Policy*. But as Heaven and Earth do conſpire and contribute, to the uſe and benefit of the life of Man; ſo indeed this ſhould be the end of *both Philoſophies*; that vain ſpeculations, and what ever is empty and barren, being rejected; that which is ſolid and fruitful may be preſerved and augmented; that ſo Knowledge may not be a Courtezan for Pleaſure, or as a bond-woman for gain; but as a ſpouſe for generation, fruit and honeſt ſolace.

§ Now me thinks I have deſcribed and opened, as by a kind of diſſection, thoſe *Peccant Humours*; or at leaſt, the Principal of them, *which have not only given impediment to the Proficience of Learning, but have given alſo occaſion to the traducement thereof.* Wherein if I have come too near the quick, it muſt be remembred, *Fidelia vulnera amantis do loſa oſcula malignantis*: however this ſurely I think I have gained, that I ought to be the better believed, concering the *Commendations of Learning* in that which follows, becauſe I have proceeded ſo freely concerning Pſal. 141.

cenſure, in that which went before. And yet I have no purpoſe to enter into a *Landative of Learning*, or to make a *Hymn to the Muſes*; though I am of opinion, that it is long ſince their Rites were duely celebrated: but my intent is, without varniſh or amplification, to take the juſt waight, and to ballance the *Dignity of Knowledge* in the ſcales with other things; and to ſearch out the true values thereof, *from teſtimonies Divine and Humane.*

CHAP. VI.

The Dignity of Learning from Divine Arguments and Teſtimonies. I. *From Gods wiſdom.* § *Angels of Illumination.* § *The firſt Light and firſt Sabbath.* § *Mans imployment in the Garden.* § Abels *contemplative life.* § *The invention of Muſick.* § *Confuſion of Tongues.* II. *The excellent Learning of* Moſes. § Job. § Solomon. § Chriſt. § *St.* Paul. § *The Ancient Doctors of the Church.* § *Learning exalts the Mind to the Celebration of Gods glory; and is a Preſervative againſt Error and Unbelief.*

I. FIrſt therefore let us ſeek the Dignity of Knowledge, in the Arch-Type or firſt Platform, which is in the *Attributes*, and in the *Acts of God*, as far as they are revealed to man, and may be obſerved with ſobriety. Wherein we may not ſeek it by the name of *Learning*; for all *Learning* is Knowledge acquired, and no knowledge in God is *acquired*, but *Original*: and therefore we muſt look for it by another name, that is *wiſdom* or *ſapience*, as the ſacred Scriptures call it. It is ſo then; In the *works* of the *Creation*, we ſee a double emanation
Gen. 1. of Divine virtue from God; whereof the one is referr'd to *Power*, the other to *Wiſdom*, that is chiefly expreſt in making the *Maſs* and ſubſtance of the *Matter*; this in diſpoſing the beauty of the *Form*. This being ſuppoſed, it is to be obſerved, that for any thing which appears in the Hiſtory of the *Creation*, the confuſed Maſs and Matter of *Heaven* and *Earth* was made in a moment of Time; yet the *Order* and *Diſpoſition* of that *Chaos* or Maſs, was the work of ſix days: ſuch a note of difference it pleaſed God to put upon the works of *Power*, and the works of *Wiſdom*; wherewith concurs, that in the Creation of the *Matter*; it is not recorded that God ſaid *Let there be Heaven and Earth*, as it is ſaid of the works following; but ſimply and actually, *God made Heaven and Earth*: ſo that the *Matter* ſeems to be as a *Manufacture*, but the *Form* carries the ſtile of a *Law* or *Decree*.

§ Let us proceed *from God to Angels or Spirits*, whoſe nature in order of Dignity is next Gods. We ſee, ſo far as credit is to be given to the Celeſtial Hierarchy, ſet forth under the name of *Dionyſius Areopagita*,
Dion. Areo. that in the order of Angels, the firſt place or degree is given to the *Seraphim*, that is, *Angels of Love*: the ſecond to the *Cherubim*, that is, *Angels of Illumination*: the third, and ſo following, Places to *Thrones*, *Principalities* and the reſt, which are Angels of Power and Miniſtry.

So

So as from this order and distribution, it appears, that *the Angels of Knowledge and Illumination, are placed before the Angels of Office and Domination.*

§ To descend from Spirits and Intellectual Forms, to Sensible and Material Forms; we read *that the first of Created forms was Light*; which hath a relation and correspondence in nature and Coporeal things, to knowledge in Spirits and Incorporeal things. So in the distribution of *Days*, we see the *day* wherein God did rest and contemplate his own works, was blest above all the *days* wherein the Fabrick of the *Universe* was Created and Disposed.

§ After the Creation was finisht, we read that *Man was plac'd in the Garden to work therein*; which work so appointed to him, could be no other than the *work of Contemplation*, that is, the end hereof was not for necessity, but for delight and exercise without vexation or trouble: For there being then no reluctation of the Creature, no sweat of the brow; mans imployment must of consequence have been matter of *delight* and *contemplation, not of Labour and Work.* Again, the first Acts that man perform'd in *Paradise*, comprehended the two summary parts of *knowledge*; those were the *view of Creatures, and the imposition of names.* For the *knowledge* which introduc'd the Fall, it was (as we have toucht before) not the *Natural Knowledge concerning the Creatures*; but the *Moral Knowledge of Good and Evil*, where the supposition was, *that Gods Commandments or Prohibitions were not the Originals of Good and Evil, but that they had other beginnings*; which man aspired to know, to the end to make a total defection from God, and to depend wholly upon himself, and his Free-will.

§. To pass to the first event or occurrence after the Fall of Man, we see (as the Scriptures have infinite Mysteries, not violating at all the truth of the story or letter) *an image of the two States, the Contemplative and Active, figur'd in the Persons of Abel and Cain*, and in their Professions and Primitive trades of life; whereof the one was a Shepherd who by reason of his leisure, rest in a place, and free view of Heaven, *is a lively image of a Contemplative life*; the other a Husbandman, that is, a man toil'd and tired with working; and his countenance fixt upon the earth: *where we may see the favour and Election of God went to the Shepherd, and not to the tiller of Ground.* Gen. 4.

§ So in the Age before the Flood, the holy Records (with in those few Memorials which are there entred and registred, touching the occurrences of that age) have vouchsafed to mention and honour *Inventors of Musick and works in Metals.* Gen. 4.

§ In the next Age after the Flood, the great judgement of God upon the ambition of Man was the *Confusion of Tongues*; *whereby the open trade and intercourse of Learning and Knowledge was chiefly embraced.* Gen. 11.

II. Let us descend to *Moses* the Law-giver, and Gods first Notary, he is adorn'd in Scripture with this commendation, *That he was seen in all the Learning of the Ægyptians*; which Nation, we know, was one of the most ancient Schools of the world; for so *Plato* brings in the Ægyptian Priest saying unto *Solon*, *You Grecians are ever children*, Acts 7.

In Timæo *you have no knowledge of Antiquity, nor Antiquity of Knowledge:* Let us take a view of the *Ceremonial Law of Moſes*, and we ſhall find (beſides the prefiguration of Chriſt, the Badge or Difference of the people of God, from the profane Race of the world; the exerciſe and impreſſion of obedience, and other ſacred uſes and fruits of the ſame Law) that ſome of the moſt learned Rabbins, have travelled profitably and profoundly in the ſame, intentively to obſerve and extract, ſome-
Levit. 13. times *a Natural, ſometimes a Moral ſence of the Ceremonies and Ordinances:* For example, where it is ſaid of the Leproſie, *If the whiteneſs have over-ſpread the fleſh, the Patient may paſs abroad for clean; but if there be any whole fleſh remaining, he is to be ſentenced unclean, and to be ſeparated at the diſcretion of the Prieſt.* From this Law one of them collects a Principle in Nature; *That Putrifaction is more contagious before maturity then after.* Another raiſeth a Moral inſtruction; *That men ore ſpread with vice, do not ſo much corrupt publick Manners, as thoſe that are half evil and but in part only.* So that from this and other like places in that Law, there is to be found, beſides Theological ſence, much aſperſion of Philoſophy.

§ So likewiſe that *excellent Book of Job*, if it be revolved with diligence, it will be found full and pregnant with the ſecrets of *Natural*
Job 26. *Philoſophy*; as for example, of *Coſmography*, and the roundneſs of the Earth in that place, *Qui extendit Aquilonem ſuper vacuum, & appendit Terram ſuper nihilum*, where the Penſileneſs of the Earth; the Pole of the North; and the Finiteneſs or convexity of Heaven, are manifeſtly touched. Again, *of Aſtronomy and Conſtellations*, in thoſe words,
Ibid. *Spiritus ejus ornavit Cœlos, & obſtetricante manu ejus eductus eſt colu-*
Job 38. *ber tortuoſus:* And in another place, *Canſt thou bind the ſweet influences of Pleiades, or looſe the bands of Orion*; where the ſetled and immoveable configuration of the firſt Stars, ever ſtanding at equal diſtance, is with great elegancy deſcribed. So in another Place, *Which*
Job 9. *maketh Arcturus, Orion and Pleiades and the ſecret chambers of the South:* Where he again points at the depreſſion of Southern Pole, deſigning it by the name of *the ſecrets of the South*, becauſe the Southern Stars are not ſeen upon our Hemiſphere. Matter of Generation
Job 10. of living Creatures, *Haſt thou not poured me out like milk, and condenſed me like Curds?* Matter of Minerals, *Surely there is a Mine for Silver, and*
Job 28. *a place wherein Gold is fined; Iron is digged up out of compacted duſt, and Braſs extracted from ſtone diſſolved in the furnace*, and ſo forward in the ſame Chapter.

§ So likewiſe in the perſon of *Solomon the King, we ſee the endowments of wiſdom, both in his Petition and Gods aſſent thereunto, preferred before all terrene and temporal felicity.* By virtue of which Donative and Grant, *Solomon* being ſingularly furniſht and enabled, not only writ thoſe *excellent Parables or Aphoriſms* concerning Divine and Moral Philoſophy; but alſo compiled a *Natural Hiſtory* of all verdure
1 Reg. 4. or vegetables *From the Cedar upon the Mountain, to the Moſs upon the Wall*; which is but the rudiment of a plant, between putrifaction and an Herb; and *alſo of all things that breath or move.* Nay the ſame *Solomon the King*, although he excell'd in treaſure and the magnificence of Building, of Shipping, and Navigation, of Service and Attendance, of Fame and Renown, and the like train of Glory, he

reaps

reaps and makes claim to himself of nothing; but only the Honour of the Inquisition, and Invention of Truth, for so he saith expressly, *The Glory of God is to conceal a thing, but the Glory of a King is to find it out.* Prov. 25. As if according to that innocent and affectionate play of Children, the Divine Majesty took delight to hide his works, to the end to have them found out; and as if *Kings* could not obtain a greater Honour, than to be Gods play-fellows in that game; especially considering the great command they have of wits and means, whereby the investigation of all things may be perfected.

§ Neither did the dispensation of God vary in the times after our Saviour came into the world; *For our Saviour himself did first shew his power to subdue Ignorance, by his conference with the Doctors of the Law, and the Priests in the Temple,* before he shewed his power to suddue Nature, by his great and so many Miracles. *And the coming of the Holy Ghost was chiefly figur'd and expresst in the similitude and guift of Tongues,* which are the *vehicula scientiæ.* Luc 2. Acta A. post. 2.

§. So in the election of *those instruments which it pleased God to use in the Plantation of the Faith,* at the first he imployed persons altogether Unlearned, otherwise than by inspiration from the holy Spirit; whereby more evidently he might declare his immediate and divine working, and might abase all humane Wisdom and Knowledge: yet nevertheless that counsel of his in this respect was no sooner perform'd, but in the next vicissitude and succession of time he sent his divine Truth into the world, waited on with other Learning, as with servants and hand-maids; therefore we see *St.* Pauls *pen, (who was only learned amongst the Apostles)* was chiefly imployed by God, in the Scriptures of the new Testament. Acta A. post. 12.

§ So again we know, *that many of the Ancient Bishops and Doctors of the Church were excellently read and studied in all the Learning of the Heathen,* in so much that the Edict of the *Emperour* Julian, *whereby it was interdicted unto Christians to be admitted into Schools, or exercises of Learning,* was esteemed and accounted a more pernitious Engine and Machination against the Christian Faith, than were all the sanguinary prosecutions of his Predecessors. Neither could the emulation and jealousie of *Gregory the First,* (otherwise an excellent man) *who designed to extinguish and obliterate Heathen Authors and Antiquity,* ever obtain the opinion of Piety and Devotion amongst holy men. But contrariwise it was the Christian Church, which amidst the inundations of the Scythians from the North-west; and the Saracens from the East, did preserve in the sacred Lap and Bosom thereof the *precious relicks of Heathen Learning,* which otherwise had utterly perisht and been extinguisht. And of late in our age we may likewise see the *Jesuits,* who partly in themselves, and partly by emulation and provocation of Adversaries, *have much quickned and strengthened the state of Learning*; we see, I say, what notable services they have done, and what helps they have brought in, to the repairing and establishing of the Roman Sea. Epist. ad Jambl. P. Diac. l. 3. Parag. 33.

§. Wherefore to conclude this Part, there are two principal Duties and Services besides ornament and illustration, which humane Learning doth perform to Faith and Religion: *The one, because they are effectual incitements to the exaltation and celebration of the Glory of God: for*

Pſal.XIX. as the Pſalms, and other Scriptures, do often invite us to the contemplation, and publication of the magnificent and wonderful works of God; ſo if we ſhould reſt only in the outward form, as they firſt offer themſelves unto our ſenſes; we ſhould do the like the injury to the Majeſty of God, as if we ſhould judge of the ſtore and wealth of ſome excellent Jeweller, by that only, which is ſet out towards the ſtreet Mat.22. in his ſhop. *The other, becauſe they miniſter a ſingular help and preſervative againſt unbelief*, and errors: *You err, not knowing the Scriptures nor the Power of God.* Where he lays before us, two books or volumes to ſtudy, if we will be ſecur'd from errors: Firſt the *volume of Scriptures*, which reveal the will of God; then the *volume of Creatures*, which expreſs his power; whereof the latter is as a key to the former, not only opening our underſtanding to conceive the true ſence of Scriptures, by the general rules of Reaſon and Laws of ſpeech; but beſides, chiefly opening our belief, in drawing us unto a due meditation of the omnipotency of God; the characters whereof are chiefly ſigned and engraven upon his works. Thus much for *Divine Teſtimonies and Evidences*, concerning the true Dignity and value of Learning.

CHAP. VII.

The Dignity of Learning from humane Arguments *and* Teſtimonies: I. Natural, *Inventors of New Arts for the Commodities of Mans life, conſecrated as Gods.* II. Political, *Civil Eſtates and affairs advanced by Learning.* § *The beſt and happieſt times under Learned Princes and others.* § *Exemplified in the immediate ſucceeding Emperours, from the death of* Domitian. III. Military, *The concurrence of Arms and Learning.* § *Exemplified in* Alexander *the* Great. § Julius Cæſar *the Dictator.* § Xenophon *the Philoſopher.*

AS for *Humane Teſtimonies and Arguments*, it is ſo large a field, as in a diſcourſe of this compendious nature and brevity, it is fit rather to uſe choice, than to imbrace the variety of them.

I. Firſt, therefore in the degrees of Honour amongſt the Heathens, it was the higheſt, to attain to a Veneration and Adoration as a God; this indeed to the Chriſtians is as the forbidden fruit; but we ſpeak now ſeparately of Humane Teſtimony. Therefore, (as we were ſaying) with the Heathens, that which the Grecians call *Apotheoſis*; and the Latines *Relatio inter Divos*; was the Herodia.l. 4 Dio.Reliqui. ſupreme Honour which man could attribute unto man: ſpecially, when it was given, not by a formal Decree or Act of Eſtate, (as it was uſed amongſt the Roman Emperours.) but freely by the aſſent of Men and inward belief. Of which high Honour there was a certain degree and middle term: For there were reckoned above *Humane Honours*, *Honours Heroical*; and *Divine*; in the Diſtribution whereof, Antiquity obſerved this order. Founders of States; Lawgivers; Extirpers of Tyrants;

Tyrants; Fathers of their Country, and other eminent Perſons in Civil Merit, were honour'd with the title of *Worthies* only, or *Demi-Gods*; ſuch as were *Theſeus*, *Minos*, *Romulus*, and the like: on the other ſide ſuch as were *Inventors and Authors of new Arts*; *and ſuch as endowed mans life with new Commodities, and acceſſions, were ever conſecrated among the Greater and Entire Gods*; which hapned to *Ceres*, *Bacchus*, *Mercury*, *Apollo*, and others, which indeed was done juſtly and upon ſound judgment: For the *merits of the former*, are commonly confined within the circle of an Age, or a Nation, and are not unlike ſeaſonable and favouring ſhowers, which though they be profitable and deſirable, yet ſerve but for that ſeaſon only wherein they fall, and for a Latitude of ground which they water: *but the benefices of the latter*, like the influences of the Sun, and the heavenly bodies, are for time, permanent, for place, univerſal: thoſe again are commonly mixt with ſtrife and perturbation; but theſe have the true character of Divine preſence, and come in *Aura leni* without noiſe or agitation.

II. Neither certainly is the *Merit of Learning in Civil affairs, and in repreſſing the inconveniences which grow from man to man, much inferiour to the other, which relieve mans neceſſities, which ariſe from Nature.* And this kind of merit was lively ſet forth in that feigned relation of *Orpheus his Theatre*, where all beaſts and birds aſſembled, which forgetting their proper natural appetites of Prey, of Game, of Quarrel, ſtood all ſociably and lovingly together liſtening unto the Airs and accords of the harp; the ſound whereof no ſooner ceaſed, or was drown'd by ſome louder noiſe, but every beaſt returned to his own nature. In which Fable is elegantly deſcribed, the nature and condition of men, who are toſſed and diſorderedwith ſundry ſavage and unreclaim'd deſires, of Profit, of Luſt, of Revenge; which yet as long as they give ear to precepts, to the perſwaſion of Religion, Laws, and Magiſtrates, eloquently and ſweetly coucht in Books, to Sermons and Harangues; ſo long is ſociety and peace maintain'd, but if theſe inſtruments be ſilent, or that ſeditions and tumults make them not audible, all things diſſolve and fall back into Anarchy and Confuſion. Philoſt. in Orph.

§ But this appeareth more manifeſtly, *when Kings or Perſons of Authority under them, or Governours in States, are endowed with Learning:* For although he might be thought partial to his own profeſſion that ſaid, *Then ſhould People or States be happy when either Kings were Philoſophers or Philoſophers Kings*; yet ſo much is verified by experience, *that under wiſe and Learned Princes and Governours of State, there hath been ever the beſt and happieſt times.* For howſoever Kings may have their errors and imperfections; that is, be liable to Paſſions and depraved cuſtoms, like other men, yet if they be illuminated by Learning, they have certain anticipate notions of Religion, Policy, and Morality, which preſerve and refrain them from all ruinous and peremptory errors and exceſſes, whiſpering evermore in their ears, when Councellours, and Servants ſtand mute and ſilent. So likewiſe *Senators and Councellours which be Learned, do proceed upon more ſafe and ſubſtantial principles than Councellours which are only men of experience:* Thoſe ſeeing dangers a farre off, and repulſing them betimes; whereas theſe are wiſe only near at hand, ſeeing nothing, but what is imminent and ready to fall upon them, and then truſt to the agility of their wit, in the point of dangers, to ward and avoid them. Plato.de Rep.5.

§ Which

§ Which felicity of times under *Learned Princes* (to keep ſtill the law of brevity by uſing the moſt ſelected and eminent examples) doth beſt appear, in the Age which paſſed from the death of *Domitianus* the Emperour, untill the reign of *Commodus*, *comprehending a ſucceſſion of ſix Princes, all Learned, or ſingular favourers and advancers of Learning, and of all ages (if we regard temporal happineſs) the moſt flouriſhing that ever Rome ſaw, which was then the Model and Epitome of the world:* A matter revealed and prefigur'd unto *Domitian* in a dream, the night before he was ſlain, *for he ſeem'd to ſee grown behind upon his ſhoulders a neck and a head of gold*; which Divination came indeed accordingly to paſs, in thoſe golden times which ſucceeded; of which we will make ſome particular, but brief commemoration. *Nerva* was a Learned Prince, an inward accquaintance, and even a Diſciple to *Apollonius* the Pythagorean; who alſo almoſt expired in a verſe of Homers,

Suet. in Dom. parag. 23.

Nerva tuiſe Dion. l. 68. Plin. Pan.

Telis Phœbe tuis, lachrimas ulciſcere noſtras.

Trajan was for his Perſon not Learned, but an admirer of Learning, and a munificent benefactor to the Learned, a Founder of Librarics, and in whoſe Court (though a warlike Prince) as is recorded, Profeſſours and Preceptors were of moſt credit and eſtimation. *Adrian* was the moſt curious man that lived, and the inſatiable inquirer of all variety and ſecrets. *Antonius* had the patient and ſubtile wit of a School-man, in ſo much as he was called *Cymini-Sector, a Carver, or a divider of Cummin-ſeed:* And of the *Divi fratres*, *Lucius Commodus* was delighted with a ſofter kind of Learning; and *Marcus* was ſurnam'd the *Philoſopher*. *Theſe Princes as they excel'd the reſt in Learning, ſo they excel'd them likewiſe in virtue and goodneſs.* *Nerva* was a moſt mild Emperour, and *who* (if he had done nothing elſe) *gave Trajan to the World.* *Trajan*, of all that reigned, for the Arts, both of Peace and War, was moſt famous and renowned: the ſame Prince enlarged the bounds of the Empire; the ſame, temperately confin'd the Limits and Power thereof; he was alſo a great Builder in ſo much as *Conſtantine* the Great, in emulation was was wont to call him, *Parietaria, Wall-Flower*, becauſe his name was carved upon ſo many walls. *Adrian* was Times rival for the victory of perpetuity, for by his care and munificence in every kind, he repaired the decaies and ruines of Time. *Antoninus*, as by name, ſo nature, a man exceeding *Pious*; for his nature and inbred goodneſs, was beloved and moſt acceptable to men of all ſorts and degrees; whoſe reign, though it was long, yet was it peaceful and happy. *Lucius Commodus* (exceeded indeed by his brother) excel'd many of the Emperours for goodneſs. *Marcus* formed by nature to be the pattern and Platform of virtue, againſt whom that *Ieſter* in the banquet of the Gods had nothing to object, or carpe at, *ſave his patience towards the humours of his wife.* So in this continued ſequence of *ſix Princes, a man may ſee the happy fruits of Learning in Soveraignty*, Painted forth in the greateſt Table of the world.

Dion. in Adriano.

Dion. in Anton. P.

Plin. Pan. Aur. vict. c. 13.

xyphil. ex Dion. Trajan.

Capitol. In Ant. P.

§ In Vero. In M. Ant.

Juliani Cæſares.

III. Neither hath *Learning an influence or operation upon Civil merit and the Arts of peace only*, but likewiſe it hath no leſs Power & Efficacy in *Martial and Military virtue*, as may notably be repreſented in the examples of *Alexander* the Great; and *Iulius Cæſar* the *Dictator*, mention'd, by the way

way before, but now in fit place to be resumed; of whose *Military vertues and Acts in war*, there needs no note or recital, having been the wonders of the world in that kind; but, of *their affection and propension towards Learning, and peculiar perfection therein*, it will not be impertinent to say something.

§ *Alexander* was bred and taught under *Aristotle*, (certainly a great Philosopher) who dedicated divers of his Books of *Philosophy* unto him: he was attended with *Callisthenes*, and divers other Learned persons that followed him in Camp, and were his perpetual associates, in all his Travels and Conquests. *What Price and Estimation he had Learning in*, doth notably appear in many particulars; as in the envy he expressed towards *Achille's* great fortune, in this, *That he had so good a Trumpet of his Actions and proweß as* Homer's *verses*. In the judgment he gave touching the *precious Cabinet of Darius*, which was found amongst the rest of the spoils; whereof, when question was mov'd, what thing was worthy to be put into it, and one said one thing, another, another, *he gave sentence for* Homer's *works*. His reprehensory letter to *Aristotle*, after he had set forth his *Book of Nature*, wherein he expostulates with him, for publishing the secrets or mysteries of Philosophy, and gave him to understand, *That himself esteemed it more to excel others in Learning and Knowledge, than in Power and Empire*. There are many other particulars to this purpose. *But how excellently his mind was endowed with Learning*, doth appear, or rather shine in all his *Speeches* and *answers*, full of knowledge and wisdom; whereof though the Remains be small, yet you shall find deeply impressed in them, the foot-steps of all sciences in Moral knowledge; Let *the speech of Alexander* be observed *touching Diogenes*, and see (if ye please) if it tend not to the true estate of one of the greatest questions in moral Philosophy? *Whether the enjoying of outward things, or the contemning of them, be the greater happiness*. For when he saw *Diogenes contented with so little*, turning to those that stood about him, that mock'd at the Cynicks condition, he said, *If I were not Alexander, I could wish to be Diogenes*. But *Seneca*, in this comparison, prefers *Diogenes*, when he saith, *Plus erat quod Diogenes nollet accipere, quàm quod Alexander posset dare, There were more things which Diogenes would have refused, than those were which Alexander could have given*. In *Natural knowledg*, observe that speech that was usual with him, *That he felt his mortality chiefly in two things, Sleep, and Lust:* which speech, in truth, is extracted out of the depth of *Natural Philosophy*, tasting rather of the conception of an *Aristotle*, or a *Democritus*, than an *Alexander*; seeing as well the indigence, as redundance of nature, design'd by these two Acts, are, as it were, the inward witnesses and the earnest of Death. In *Poesy*, let that speech be observed, when upon the bleeding of his wounds, he called unto him one of his Flatterers, that was wont to ascribe unto him divine honour; *look* (saith he) *this is the blood of a man, not such liquor as Homer speaks of, which ran from Venus hand, when it was pierced by Diomedes:* with this speech checking both the *Poets*, and his flatterers, and himself. In *Logick* observe that reprehension of *Dialectick Fallacies*, in repelling and retorting Arguments, in that saying of his wherein he takes up *Calisander*, confuting the informers against his father *Antipater*. For when *Alexander* hapned to say, *Do you think these*

Plut in Alexand.

Plut. ut supra.

Ut supra.

Ut supra.

De Ben. 5.

Plut. in Alexand.

Plut.in Alexand. *men would come ſo far to complain, except they had juſt cauſe?* Caſſander anſwered, *Yea, that was it that made them thus bold, becauſe they hoped the length of the way would dead the diſcovery of the aſperſion*; *See* (ſaith the King) *the ſubtilty of Ariſtotle wreſting the matter both waies, Pro and Contra.* Yet the ſame Art which he reprehended in another, he knew well how to uſe himſelf, when occaſion required, to ſerve his own turn. For ſo it fell out that *Caliſthenes*, (to whom he bare a ſecret grudge, becauſe he was againſt the new ceremony of his adoration) being mov'd, at a banquet, by ſome of thoſe that ſate at table with him, that for entertainment ſake (being he was an eloquent man) he would take upon him ſome Theme, at his own choice, to diſcourſe upon, which *Caliſthenes* did, and chuſing the Praiſes of the Macedonian Nation, performed the ſame with the great applauſe of all that heard him: whereupon *Alexander*, nothing pleaſed, ſaid, *That upon a good ſubject it was eaſie for any man to be eloquent*, but turn, ſaid he, your ſtile, and let us hear what you can ſay againſt us. *Caliſthenes* undertook the charge, and performed it, with that ſting and life, that *Alexander* was fain to interrupt him, ſaying; *An ill mind alſo, as well as a good cauſe might infuſe eloquence. For Rhetorick*, whereto Tropes and Ornaments appertain; ſee an elegant uſe of Metaphor, wherewith he taxed *Antipater*, who was an Imperious and Tyrannous Governour. For when one of *Antipaters* friends commended him to *Alexander* for his moderation. and that he did not degenerate, as other Lievtenants did, into the Perſian Pride, in uſing Purple, but kept the ancient Macedon habit, *But Antipater* (ſaith *Alexander*) *is all Purple within.* So likewiſe that other Metaphor is excellent; when *Parmenio* came unto him in the plain of *Arbella*; and ſhewed him the innumerable multitude of enemies which viewed in the night, repreſented, by the infinite number of lights, a new Firmament of ſtarres; and thereupon adviſed him to aſſail them by night, *I will not, ſaid Alexander, ſteal a victory. For matter of Policy*, weigh that grave and wiſe diſtinction, which all ages have embraced, whereby he differenced his two chief friends, *Epheſtion* and *Craterus*, when he ſaid, *That the one loved Alexander, and the other loved the King*, Deſcribing a Difference of great import, amongſt even the moſt faithful ſervants of Kings, *that ſome in ſincere affection love their Perſons, others in duty love their Crown.* Obſerve how excellently he could tax an error, ordinary with Counſellors of Princes, who many times give counſel, according to the model of their own mind and fortune, and not of their Maſters. For when *Darius* had made great offers to *Alexander: I, ſaid Parmenio, would accept theſe conditions, If I were as Alexander:* ſaid *Alexander, ſurely ſo would I, were I as parmenio.* Laſtly, weigh that quick and acute reply, which he made to his friends asking him, *what he would reſerve for himſelf, giving away ſo many and great gifts? Hope*, ſaid he; as one who well knew that when all accounts are caſt up aright, *Hope* is the true portion and inheritance of all that reſolve upon great enterprizes. This was *Julius Cæſar's* portion when he went into *Gaul*, all his eſtate being exhauſted by profuſe Largeſſes. This was likewiſe the portion of that noble Prince, howſoever tranſported with Ambition, *Henry Duke of Guyſe*, of whom it was uſually ſaid, *That he was the greateſt uſurer in all France, becauſe that all his wealth was in names, and that he had turned his whole*

Plutarch. ut ſupra.

Plutarch. Dict. Not.

Plut.in Alexan.

Ut ſupra.

Plut.in Alex.

Ut ſupra.

S. Fran. Bacon. Apol.

whole eſtate into obligations. But the admiration of *this Prince*, whilſt I repreſent him to my ſelf, not as *Alexander the Great*, but as *Ariſtotles Scholar*, hath perchance carried me too far.

§ As for *Iulius Cæſar, the excellency of his Learning*, needs not to be argued, either from his education, or his company, or his anſwers; For this, in a high degree, doth declare it ſelf in his own writings, and works, whereof ſome are extant, ſome unfortunately periſh't. For firſt, there is left unto us *that excellent Hiſtory of his own wars, which he entitled only a Commentary*; wherein all ſucceeding times have admired the ſolid weight of matter; and lively images of Actions and Perſons expreſt in the greateſt propriety of words, & perſpicuity of Narration, that ever was. Which endowments, that they were not infuſed by nature, but accquired by *Precepts and inſtructions of Learning*, is well witneſſed by that work of his entitled *De Analogia*, which was nothing elſe but a *Grammatical Philoſophy*, wherein he did labour, to make this *vox ad Placitum*, to become *vox ad Licitum*, and to reduce cuſtome of ſpeech, to congruity of ſpeech; that words, which are the the images of things, might accord with the things themſelves, and not ſtand to the Arbitrement of the vulgar. So likewiſe we have by his edict, *a reformed computation of the year*, correſpondent to the courſe of the Sun; which evidently ſhews, that he accounted it his equal glory, to find out the laws of the ſtars in heaven; as to give laws to men on earth. So in that Book of his entitled *Anti-Cato*; it doth eaſily appear, that he did aſpire, as well to victory of wit, as victory of war; undertaking therein a Conflict againſt the greateſt Champion with the Pen, that then lived, *Cicero the Orator.* Again in his Book of *Apophthegms*, which he collected, we ſee he eſteemed it more honour, to to make himſelf but a pair of Tables, or Codicils, wherein to regiſter the wiſe and grave ſayings of others; than if his own words were hallowed as Oracles, as many vain Princes, by cuſtom of Flattery, delight to do. But if I ſhould report divers of his *Speeches*, as I did in *Alexander*, they are truly ſuch, as Solomon notes, *Verba ſapientum ſunt tanquam aculei, & tanquam clavi in altum defixi:* wherefore I will here only propound three, not ſo admirable for elegancy, as for vigour and efficacy: As firſt, it is reaſon he be thought *a maſter of words*, that could with one word appeaſe a mutiny in his army: the occaſion was this; The *Romans*, when their Generals did ſpeak in their Army, did uſe the word, *Milites*, when the Magiſtrates ſpake to the people, they did vſe the word, *Quirites: Cæſars* ſouldiers were in a tumult, and ſeditiouſly prayed to be caſſed, not that they ſo meant, but by expoſtulation thereof, to draw *Cæſar* to other conditions; *He*, nothing daunted and reſolute, after ſome ſilence began thus, *Ego, Quirites*, which word did admit them already caſhiered; wherewith the ſouldiers were ſo ſurprized, and ſo amazed; as they would not ſuffer him to go on in his ſpeech; and relinquiſhing their demands of *Diſmiſſion*, made it now their earneſt ſuit, that the name of *Milites*, might be again reſtored them. *The ſecond ſpeech* was thus; *Cæſar* did extreamly affect the name of *King*; therefore ſome were ſet on, as he paſſed by, in popular acclamation to ſalute him *King:* he finding the cry weak and poor, put off the matter with a jeſt, as if they had miſt his ſir-name, *Non Rex ſum*, (ſaith he) *ſed Cæſar*; indeed ſuch a ſpeech, as if it be exactly ſearch't,

Cic. de clar. Orat. Cic. de Orat. l. 3. Suet. in Iul.

Suet. in parag. 56.

Parag. 55.

Suet. in parag. 40.

Plut. in Cæſar.

Eccleſ. 12.

Suet. in Iul. parag. 70.

Suet. parag. 79.

the life and fulneſs of it can ſcarce be expreſt. For firſt it pretended a refuſal of the name, but yet not ſerious. Again, it did carry with it an infinite confidence, and magnanimity; as if the Appellation *Cæſar* had been a more eminent Title, than the name of King; which hath come to paſs, and remaineth ſo till this day. But, that which moſt made for him, this ſpeech by an excellent contrivance, advanced his own purpoſe; for it did cloſely inſinuate, that the Senate and People of *Rome* did ſtrive with him about a vain ſhadow, a name only, (for he had the power of a King already) and for ſuch a name, whereof mean families were inveſted; for the Sir-name *Rex*, was the title of many families; as we alſo have the like in our Dialect. The laſt ſpeech, which I will mention in this place, was this; When *Cæſar*, after the war was declared, did poſſeſs himſelf of the City of *Rome*, and had broke open the inner *Treaſury*, to take the mony there ſtored up, for the ſervice of the war, *Metellus*, for that time Tribune, withſtood him; to whom *Cæſar*, *If thou doſt perſiſt* (ſaith he) *thou art dead*; preſently taking himſelf up, he added, *Young man, it is harder for me to ſpeak this, than to do it*; *Adoleſcens, durius eſt mihi hoc dicere quam facere*; A ſpeech compounded of the greateſt terror, and the greateſt clemency, that could proceed out of the mouth of man. But, to purſue *Cæſars* Abilities in this kind no farther, it is evident, that he knew well *his own perfection in Learning*, as appears, when ſome ſpake, what a ſtrange reſolution it was in *Lucius Scylla* to reſign his *Dictature*; he ſcoffing at him, anſwered, *That* Scylla *could not skill of Letters, and therefore knew not how to Dictate.*

Plut. in Cæſar.

Suet. in Jul. §. 77.

§ Now it were time to leave this point touching *the ſtrict concurrance of Military virtue and Learning*, (for what example in this kind, can come with any grace, after *Alexander* and *Cæſar?*) were it not that I am tranſported with the height and rareneſs of one other particular inſtance, as that which did ſo ſuddenly paſs from ſcorn to wonder; and it is of *Xenophon the Philoſopher*, who went from *Socrates* his School into *Aſia* with *Cyrus* the younger, in his expedition againſt King *Artaxerxes*. This *Xenophon*, at that time was very young, and never had ſeen the wars before; neither had then, any command in the Army, but only followed the war as a voluntary, for the love and converſation of *Proxenus* his friend. He was by chance preſent when *Falinus* came in meſſage from the great King, to the Grecians, after that *Cyrus* was ſlain in the field, and the Grecians, a handful of men, having loſt their General, left to themſelves in the midſt of the Provinces of *Perſia*, cut off from their Country by the interception of many miles, and of very great and deep Rivers. The Meſſage did import that they ſhould deliver up their Arms, and ſubmit themſelves to the Kings mercy: to which meſſage before publick anſwer was made, divers of the Army conferr'd familiarly with *Falinus*, amongſt whom *Xenophon* hapned to ſay thus, *Why*, (ſaid he) *Falinus we have now but theſe two things left, our Arms and our Virtue, if we yield up our Arms, how ſhall we make uſe of our Virtue?* whereto *Falinus* ſmiling ſaid, *If I be not deceived, Young Gentleman, you are an Athenian, and ſtudy Philoſophy, and it is pretty that you ſay, but you are much abuſed, if you think your Virtue can withſtand the Kings Power*; here was the ſcorn, the wonder followeth. This *young Scholar or Philoſopher*, after all the Cap-

Xen. Hiſt. de Exp. Cyri.

Hiſt. de Cy. Ex. l. 2.

tains

tains and Commanders were murthered by treaſon, conducted ten thouſand Foot, through the heart of all the Kings high Countries, from *Babylon* to *Grecia*, in deſpite of all the Kings forces; to the aſtoniſhment of the world, and the encouragement of the Grecians in time ſucceeding, to make invaſion upon the *Perſian Monarchy* and to ſubvert it. Which indeed ſoon after, *Jaſon* the *Theſſalian* conceiv'd and deſign'd; *Ageſilaus* the *Spartan* attempted and commenced; *Alexander* the *Macedonian* at laſt atchieved, all being ſtirred up, by this *brave leading Act of that young Scholar.*

CHAP. VIII.

The Merit of Learning from the influence it hath upon Moral Virtues. § *Learning a ſoveraign remedy for all the diſeaſes of the Mind.* § *The Dominion thereof greater than any Temporal Power, being a Power over Reaſon and Belief.* § *Learning gives Fortunes, Honours, Delights excelling all others, as the ſoul the ſenſe.* § *Durable Monuments of Fame.* § *A Proſpect of the immortality of a future world.*

TO proceed now, *from Imperial and Military Virtue, to Moral, and that which is the Virtue of Private men:* Firſt, that of the Poet is a moſt certain truth,

Scilicet ingenuas didiciſſe fideliter Artes
Emollit mores nec ſinit eſſe feros. Ovid. de Pont.

For *Learning doth reclaim mens minds from Wildeneſs and Barbariſm*; but indeed, the accent had need be put upon *Fideliter*; for a ſuperficial confuſed knowledge doth rather work a contrary effect. I ſay, *Learning takes away levity, temerity, and inſolency*, whilſt it ſuggeſts all dangers and doubts, together with the thing it ſelf; ballanceth the weight of reaſons and arguments on both ſides; turns back the firſt offers and *placits* of the mind as ſuſpect, and teacheth it to take a tried and examin'd way: The *ſame doth extirpate vain and exceſſive admiration*, which is the root of all weak adviſement. For we *admire* things, either becauſe they are *New*, or becauſe they are *Great:* As for *novelty*, no man that wades in Learning, and contemplation of things throughly, but hath this printed in his heart, *Nil novi ſub ſole:* neither can any man much marvail at the *play of Puppets*, that thruſts but his head behind the curtain; and adviſeth well of the organs and wires that cauſe the motion. As for *Magnitude*, as *Alexander the Great*, after he was uſed to great Battles, and conqueſts in *Aſia*; when at any time he received Letters out of *Greece*, of ſome fights and ſervices there, which were undertaken commonly for ſome Bridge, or a Fort, or at moſt for the beſiege of ſome City; was wont to ſay, *It ſeemed to him, that he was advertiſed of the Battles of* Homers *Frogs and Mice:* So certainly, if a man meditate upon the world and the Fabrick thereof; Eccleſ. 1.

thereof; to him the Globe of the Earth, with men marching upon it, (the Divineneſs of ſouls excepted) will not ſeem much other, than *a Hillock of Ants whereof ſome creep, and run up and down with their Corn, others with their Eggs, others empty; all about a little heap of Duſt.*

Sen. Nat. Q. lib. 1. pref.

§ Again, *Learning takes away, or at leaſt, mitigates the fear of death, and adverſe Fortune; which is one of the greateſt impediments to Virtue or Manners.* For if a mans mind be ſeaſoned and *imbued* with the contemplation of Mortality, and the corruptible nature of things, he will, in his apprehenſion, concur with *Epictetus*, who going forth one day ſaw a woman weeping for her Pitcher of Earth; and going forth the next day ſaw another woman weeping for her ſon, ſaid, *Heri vidi fragilem frangi, hodie vidi mortalem mori:* Therefore *Virgil* did excellently and profoundly couple the knowledge of the cauſe and the conqueſt of fears together, as concomitants:

Enchir. C. 33. Arr. l. 3. c. 24.

Felix qui potuit rerum cognoſcere cauſas;
Quiq; metus omnes & inexorabile fatum,
Subjecit pedibus, ſtrepitumq; Acherontis avari.

Geor. 2

It were too long to go over the particular Remedies, *which Learning doth miniſter to all the diſeaſes of the Mind*; ſometimes purging the ill Humours, ſometimes opening the obſtructions, ſometimes helping digeſtion, ſometimes exciting appetite, often healing the wounds and exulcerations thereof, and the like. Therefore I will conclude with that, which ſeems to be the ſum of all, which is, *that Learning ſo diſpoſeth and inclineth the mind, as that it is never wholly ſetled and fixt in the defects thereof, but ever awakes it ſelf and breaths after a Growth and Perfection:* For the unlearn'd man knows not what it is to *deſcend into himſelf, or to call himſelf to account, or what a ſweet life it is ſenſibly to feel, that he is every day better.* If he chance to have any good parts, he will be boaſting theſe; and every where expoſe them to the full view; and it may be uſe them dexterouſly to his own advantage and reputation; but not much improve or encreaſe them. Again, what faults ſoever he hath, he will uſe art and induſtry to hide and colour them, but not to amend them; like an ill Mower that mowes on ſtill and never whets his Sythe: Contrariwiſe, *a learned man doth not only imploy his mind and exerciſe his good parts, but continually reforms himſelf, and makes Progreſſion in virtue:* Nay, to ſay all in a word. Certain it is, that *Veritas* and *Bonitas differ but as the Seal and the Print; for goodneſs is Truth's impreſſion*; and on the contrary the ſtorms and tempeſts of Vice and Paſſions break from the Clouds of *error* and *faſhood*.

Plat. Alcib. Porph. in Stob. Sen. Epiſt. Plut. Mor.

II. *From Morality, let us paſs on to matter of power and commandment*, and conſider, *whither there be any ſoveraignty or empire comparable to that wherewith Learning inveſts and crowns mens names.* We ſee the Dignity of commanding, is according to the dignity of the commanded: Commandment over Beaſts and Cattle, ſuch as Heardmen and Shepherds have, is a thing contemptible; Commandment over children, ſuch as School-maſters and Tutors have, is a matter of ſmall honour; commandment over ſlaves, is a diſparagement, rather than a honour; neither

ther is the commandment of Tyrants much better, over a ſervile People, diſmantled of their Spirits and generoſity of mind; therefore it was ever held, that honours in free Monarchies and Common-wealths had a ſweetneſs more than in Tyrannies; becauſe a command over the willing is more honourable than over the forced and compelled: Wherefore *Virgil*, when he would out of the higheſt ſtrain of his Art expreſs the beſt of Humane honours, that he could attribute to *Cæſar*, he doth it in theſe words,

——*victorq; volentes* Georg. 4.
——*Per Populos dat jura, viamq; affectat Olympo.*

But the Commandment of knowledge is far higher than the Commandment over the will, though free, and not enſlaved and vaſſal'd: For it is a Dominion over Reaſon, Belief, and the Underſtanding, which is the higheſt part of man, and gives Law to the will it ſelf: For without Queſtion there is no power on earth, which advanceth and ſets up a Throne, and, as it were, *a Chair of eſtate*, in the ſouls of men and their Cogitations, Aſſents, and Belief, *but Knowledge and Learning:* And therefore we ſee, the deteſtable and extreme pleaſure that *Arch-Hereticks*, *falſe Prophets*, and *Impoſtors* are raviſht, and tranſported withal, when once they find that they begin to have a Dominion, and Superiority over the faith and conſciences of men; indeed ſo great, as he that hath once taſted it, it is ſeldom ſeen that any perſecution or torture can make them relinquiſh this Soveraignty: But as this is that which the Divine Author of the Revelations calls, *The depth or profoundneſs of Satan*; ſo on the contrary, the Apoc. 2.
juſt and lawful Soveraignty over mens minds, eſtabliſht by the clear evidence, and ſweet commendation of Truth, approacheth certainly neareſt to the ſimilitude of the Divine Rule.

§ *As for Fortunes and Honours, the magnificence of Learning doth not ſo enrich and adorn whole Kingdoms and Common-wealths, as it doth not likewiſe amplifie and advance the Fortunes and Eſtates of particular perſons;* For it is an ancient obſervation, that *Homer hath given more men their living, than either* Scylla, *or* Cæſar, *or* Auguſtus *ever did*, notwithſtanding their great Largeſſes, ſuch infinite donatives, and diſtributions of much Land. No doubt, it is hard to ſay, whether Arms or Learning have advanced greater numbers: But if we ſpeak of Soveraignty, we ſee, *that if Arms have carried away the Kingdom, yet Learning hath born away the Prieſthood*, which ever hath been in ſome competition with Empire.

§ Again, *If you contemplate the Pleaſure and Delight of Knowledge and Learning, aſſuredly it far ſurpaſſes all other pleaſure:* For what? Shall, perchance, the pleaſures of the Affections ſo far excel the pleaſures of the ſenſes, as a happy obtaining of a deſire, doth a ſong or a dinner; and muſt not by the ſame degrees of conſequence, the pleaſure of the Intellect tranſcend thoſe of the Affections? In all other pleaſures there is a finite ſatiety, and after they grow a little ſtale, their flower and verdure vades and departs; whereby we are inſtructed, that they were not indeed pure and ſincere pleaſures, but ſhadows and deceits of *Pleaſures*; and that it was the Novelty which pleas'd, and not the Quality: therefore voluptuous men often turn Fryars, and the declining

age

age of ambitious Princes is commonly more ſad and beſieged with Melancholy; *But of Knowledge there is no ſatiety*; but viciſſitude, perpetually and interchangeably, returning of fruition and appetite; ſo that the good of this delight muſt needs be ſimple, without Accident or Fallacy. Neither is that *Pleaſure* of ſmall efficacy and contentment in the mind of man, which the Poet *Lucretius* deſcribeth elegantly, *Suave, mari magno turbantibus æquora ventis*, &c. *It is a view of delight* (ſaith he) *to ſtand or walk upon the ſhore, and to ſee a ſhip toſt with tempeſt upon the ſea: a pleaſure to ſtand in the window of a Caſtle, and to ſee two Battails joyn upon a plain: but it is a pleaſure incomparable, for the mind of man, by Learning to be ſetled and fortified in the Tower of Truth, and from thence to behold the errors and wandrings of other men below.*

De Rer. Nat. lib. 2.

§ Laſtly, leaving the vulgar arguments, *That by Learning man excels man, in that wherein man excels beaſts*; that by the help of Learning, man aſcends in his underſtanding, even to the heavens, whither in body he can not come, and the like; let us conclude this diſcourſe concerning *the dignity and Knowledge of Learning*, with that good, whereunto mans nature doth moſt aſpire, *Immortality and continuance*. For to this tendeth Generation, raiſing of Houſes and Families, Buildings, Foundations, Monuments, Fame, and in effect the ſum and height of humane deſires. *But we ſee how far the monuments of Wit and Learning, are more durable than the Monuments of materiate Memorials and Manufactures.* Have not the *verſes of Homer* continued xxv Centuries of years and above, without the loſs of a ſyllable, or letter? during which time, infinite number of Places, Temples, Caſtles, Cities, have been decayed or been demoliſht. The *Pictures* and *Statues* of *Cyrus*, *Alexander*, *Cæſar*, no nor of the Kings and Princes of much later years, by no means poſſible are now recoverable; for the Originals, worn away with age, are periſht; and the Copies daily loſe of the life and Primitive reſemblance; *But the images of mens wits, remain unmaimed in books for ever, exempt from the injuries of time, becauſe capable of perpetual renovation.* Neither can they properly be called Images, becauſe, in their way, they generate ſtill and caſt their ſeeds in the minds of men; raiſing and procreating infinite Actions and Opinions in ſucceeding ages. So that if the invention of a ſhip, was thought ſo noble and wonderful, which tranſports Riches and Merchandice from Place to Place; and conſociates the moſt remote regions in participation of their fruits and commodities; *how much more are letters to be magnified, which as ſhips, paſſing through the vaſt ſea of time, do counite the remoteſt ages of Wits and Invention in mutual Trafique and Correſpondency?*

§ Furthermore, we ſee ſome of the Philoſophers which were moſt immerſed in the ſenſes and leaſt divine, and which peremptorily denyed the immortality of the ſoul, yet convicted by the power of truth came to this point, *That whatſoever Motions and Acts the ſpirit of man could perform without the Organ of the body, it was probable that thoſe remained after death*; ſuch as were the motions of the underſtanding, but not of the affections; *ſo immortal and incorruptible a thing did knowledge ſeem to them to be.* But we, illuminated with divine Revelation, diſclaiming theſe rudiments and deluſions of the ſenſes, know that not only the mind, but the affections purified; not only the ſoul, but the body ſhall be advanced in its time to immortality. But it muſt be remembred,

remembred, both now and other times, as the nature of the point may require, that in the proofs, of the dignity of Knowledge and Learning, I did at the beginning ſeparate Divine Teſtimonies, from Humane; which method I have conſtantly purſued, and ſo handled them both apart. Although all this be true, nevertheleſs I do not take upon me, neither can I hope to obtain by any Perorations, or pleadings of this caſe touching Learning, to reverſe the judgement either of *Æſops Cock, that preferred the Barley-corn before the Gemm*; or of *Midas, that being choſen Judge between* Apollo, *Preſident of the Muſes, and* Pan *Preſident of Sheep*, judg'd for plenty; or of *Paris, that judged for Pleaſure* and love, againſt wiſdom and power; or of *Agrippina*'s choice, *Occidat matrem, modo imperet!* preferring Empire with any condition never ſo deteſtable; or of *Ulyſſes, qui vetulam prætulit immortalitati*; being indeed figures of thoſe that prefer cuſtom before all excellency; and a number of the like popular judgements: for theſe things muſt continue as they have been, but ſo will that alſo continue, whereupon Learning hath ever relied as on a firm foundation which can never be ſhaken: *Juſtificata eſt ſapientia à Filiis ſuis.*

Ovid. Met. XI.

Eurip. in Troad.

Tac. An. XIV.

Mat. XI.

THE Second Book OF *FRANCIS* L. *VERULAM* VICOUNT S^t. *ALBAN*, OF THE Dignity and Advancement OF LEARNING.

To the KING.

THE PROEM

The Advancement of Learning commended unto the care of Kings. I. The Acts thereof in general, three, *Reward*, *Direction*, *Assistance.* II. In special, about three objects, *Places*, *Books*, *Persons.* § In places four Circumstances, *Buildings*, *Revenues*, *Priviledges*, *Laws of Discipline.* § In Books two, *Libraries*, *good Editions.* § In Persons two, *Readers of Sciences Extant*; *Inquirers into Parts non-extant.* III. Defects in these Acts of Advancement, six; *Want of Foundations for Arts at large.* § *Meanness of Salary unto Professors.* § *Want of allowance for Experiments.* § *Preposterous institutions, and unadvised practices in Academical Studies.* § *Want of Intelligence between the Universities of* Europe. § *Want of Inquiries into the Deficients of Arts.* § *The Authors Design.* § *Ingenious Defence.*

IT might seem to have more convenience, although it come often otherwise to pass, (Excellent King,) that those that are fruitful in their Generation, and have, this way, a fore-sight of their own immortality in their Descendants, should above all men living, be careful of the the estate of future times, unto which they cannot but know that they must at last transmit their dearest Pledges. Q. *Elizabeth* was a sojourner in the world, in respect of her unmarried life, rather than an inhabitant: she hath indeed adorned her own

time, and many ways enricht it; but in truth, to Your Majesty, whom God hath blest with so much Royal Issue worthy to perpetuate you for ever; whose youthful and fruitful Bed, doth yet promise more children; it is very proper, not only to irradiate, as you do, your own times, but also to extend your Cares to those Acts which succeeding Ages may cherish, and Eternity it self behold: Amongst which, if my affection to Learning do not transport me, there is none more worthy, or more noble, *than the endowment of the world with sound and fruitful Advancements of Learning:* For why should we erect unto our selves some few Authors, to stand like *Hercules Columns*, beyond which there should be no discovery of knowledge; seeing we have *your Majesty*, as a bright and benign Star, to conduct and prosper us in this Navigation.

I. To return therefore unto our purpose, let us weigh and consider with our selves, what hitherto hath been performed, what pretermitted by Princes and others, for the *Propagation of Learning*: And this we will pursue closely and distinctly, in an Active and Masculine Expression, no where digressing, nothing dilating. Let this ground therefore be laid, which every one may grant, that the greatest and most difficult works are overcome, either by the *Amplitude of Reward*, or by the *wisdom and soundness of Direction*, or by *conjunction of Labours*; whereof the first, *encourageth our endeavours*; the second, *takes away Error and Confusion*; the third, *supplies the frailty of Man.* But the Principal amongst these three, is the *wisdom and soundness of Direction*, that is, a Delineation and Demonstration of a right and easie way to accomplish any enterprize: *Claudus enim*, as the saying is, *in via antevertit Cursorem extrà viam*; and *Solomon* aptly to the purpose, *If the Iron be blunt, and he do not whet the edge, then must he put too more strength; but wisdom is profitable to Direction:* By which words he insinuateth, that *a wise election of the Mean, doth more efficaciously conduce to the perfecting of any enterprize, than any enforcement or accumulation of endeavours.* This I am pressed to speak, for that (not derogating from the Honour of those who have any way deserved well of Learning) I see and observe, that many of their Works and Acts, are rather matter of *Magnificence* and *Memory* of their *own names*, than of *Progression and Proficience of Learning*; and have rather encreased the *number of Learned men*, than much promoted the *Augmentation* of *Learning.*

Eccles. 10.

II. The Works or Acts pertaining to the *Propagation of Learning*, are conversant about three objects; about the *Places of Learning*; about the *Books*; and about the *Persons of Learned men.* For as *water*, whether falling from the Dew of Heaven, or rising from the springs of the earth, is easily scattered and lost in the ground, except it be collected into some *receptacles*, where it may by union and Congregation into one body comfort and sustain it self; for that purpose the industry of man hath invented Conduits, Cisterns and Pools, and beautified them with divers accomplishments, as well of Magnificence and State, as of Use and Necessity: so this most excellent *liquor of Knowledge*, whether it distil from a divine inspiration; or spring from the *senses*, would

would ſoon periſh and vaniſh, if it were not conſerved in *Books*, *Traditions*, *Conferences*, and in *Places* purpoſely deſigned to that end; as *Univerſities*, *Colledges*, *Schools*, where it may have fixt *ſtations* and Power and Ability of uniting and improving it ſelf.

§ And firſt, the works which concern the *Seats of the Muſes*, are four, Foundations of *Houſes*; Endowments with *Revenues*; Grant of *Priviledges*; *Inſtitutions, and ſtatutes for Government*; all which chiefly conduce to privateneſs and quietneſs of life, and a diſcharge from cares and troubles, much like the *ſtations Virgil* deſcribeth for the Hiving of Bees.

Principio Sedes Apibus ſtatioque petenda,
Quo neque ſit ventis aditus, &c. Geor. 4.

§ But the works touching *Books* are chiefly two: Firſt *Libraries*, wherein, as in famous ſhrines, the Reliques of the Ancient Saints full of virtue, are repoſed. Secondly, *new Editions of Authors, with corrected impreſſions*; *more faithful Tranſlations, more profitable Gloſſes, more diligent Annotations*; with the like train furniſh't and adorned.

§ Furthermore, the works pertaining to the *Perſons of Learned men*, beſides the *Advancing and Countenancing of them* in general, are likewiſe two; the *Remuneratioon* and *Deſignation of Readers*, in *Arts and Sciences already extant* and known; and the *Remuneration and Deſignation of writers concerning thoſe parts of Knowlege, which hitherto have not been ſufficiently till'd and labour'd.* Theſe briefly are the works and Acts, wherein the Merit of many renowned Princes and other illuſtrious Perſons, hath been famed, *towards the ſtate of Learning.* As for particular Commemoration, of any that hath well deſerved of Learning, when I think thereof, that of *Cicero* comes into my mind, which was a motive unto him after his return from baniſhment to give general thanks, *Difficile non aliquem; ingratum, quenquam præterire:* Let us rather according to the advice of Scripture, *Look unto the part of the race which is before us, than look back unto that which is already attained.* Cic. Orat. poſt redit. Epiſt. ad Phil. 3.

III. Firſt therefore, amongſt ſo may *Colledges* of Europe, excellently founded, I find ſtrange, *that they are all deſtinated to certain Profeſſions and none Dedicated to Free and Univerſal ſtudies of Arts and Sciences:* For he that judgeth, that all Learning ſhould be referred to uſe and Action, judgeth well; but yet it is eaſie this way to fall into the error taxt in the Ancient Fable, in which, *the other parts of the Body entred an Action againſt the ſtomach, becauſe it neither perform'd the office of Motion, as the Limbs do; nor of ſenſe, as the head doth*; but yet all this while it is the ſtomach, that concocteth, converteth, and diſtributeth nouriſhment into the reſt of the body: So if any man think *Philoſophy and univerſal contemplations a vain and idle ſtudy*, he doth not conſider that all Profeſſions and Arts from thence derive their ſap and ſtrength. And ſurely I am perſwaded that this hath been a great cauſe *why the happy progreſſion of Learning hitherto hath been retarded*; becauſe theſe Fundamentals have been ſtudied but only in paſſage, and deeper draughts have not been taken thereof: *For if you will have a Tree bear more fruit than it hath uſed to do*, it is not any thing you can do to the Boughs, Liv. lib. 2. v.c. 260. Æſop. Fab.

but

but it is the ſtirring of the earth about the root, and the application of new mould, or you do nothing. Neither is it to be paſſed over in ſilence, *that this dedicating of Colledges and Societies, only to the uſe of Profeſſory Learning, hath, not only, been an enemy to the growth of Sciences; but hath redounded likewiſe to the prejudice of States and Gouernments:* For hence it commonly falls out that Princes, when they would make choice of Miniſters fit for the Affairs of State, find about them ſuch a marvellous ſolitude of able men; becauſe there is no education Collegiate deſign'd to this end, where ſuch as are fram'd and fitted by nature thereto, might give themſelves chiefly to *Hiſtories*, Modern *Languages*, Books and *diſcourſes of Policy*, that ſo they might come more able and better furniſh't to ſervice of State.

§ And becauſe *Founders of Colledges do Plant, and Founders of Lecturers do water*, it followeth now in order to ſpeak of the Defects which are in publick Lectures; *the ſmalneſs of ſtipends* (eſpecially with us) *aſſigned to Readers of Arts or of Profeſſions:* For it doth much import to the *Progreſſion and Proficiency of Sciences*, that Readers in every kind be choſen out of the ableſt and moſt ſufficient men; as thoſe that are ordained, not for tranſitory uſe, but for to maintain and propagate the ſeeds of Sciences for future Ages; This cannot be, except the Rewards and Conditions be appointed ſuch, as may ſufficiently content the moſt eminent man in that Art, ſo as he can be willing to ſpend his whole Age in that function and never deſire to practice. Wherefore that *Sciences may flouriſh*, *Davids* Military Law ſhould be obſerved, *That thoſe that ſtayed with the Carriage ſhould have equal parts with thoſe that were in the Action*; elſe will the Carriages be ill attended. So *Readers in Sciences* are, as it were, Protectors and Guardians of the Proviſion of Learning, whence the Action and ſervices of Sciences may be furniſh't. Wherefore it is reaſon that the *Salaryes of Speculative men, ſhould be equal to the gains of Active men*; otherwiſe if allowances to Fathers of Sciences be not in a competent degree ample and condign, it will come to paſs,

1 Sam. 30.

Vt Patrem invalidi referent jejunia Nati.

Virg. Geor. 3.

§ Now I will note another *Defect*, wherein ſome Alchymiſt ſhould be called unto for help; for this Sect of Men adviſe Students to ſell their Books and to build furnaces; to quit *Minerva* and the Muſes, as Barren Virgins, and to apply themſelves to *Vulcan*. Yet certainly it muſt be confeſt, that unto the depth of *Contemplation*, and the fruit of *Operative ſtudies* in many Sciences, eſpecially *Natural Philoſophy*, and *Phyſick*; *Books are not the only ſubſidiary Inſtruments*, wherein the Munificence of men, hath not been altogether wanting; for we ſee *Spheres*, *Globes*, *Aſtrolabes*, *Maps*, and the like, have been provided, and with induſtry invented, as Helps to *Aſtronomy* and *Coſmography*; as well as *Books*. We ſee likewiſe ſome places dedicated to the ſtudy of *Phiſick*, to have *Gardens for the inſpection and obſervation of ſimples* of all ſorts; and to be authorized the uſe of *Dead Bodies for Anatomy-Lectures*. But thoſe do reſpect but a few things; in the generality ſet it down for Truth, *That there can hardly be made any main Proficience in the diſcloſing of the ſecrets of Nature, unleſs there be liberal Allowance for Experiments*; *whether*

ther of Vulcan *or of* Dædalus; *I mean of Furnace, or of Engine, or any other kind:* And therefore *as Secretaries and Spials of State,* are allowed to bring in Bills for their diligence in the inquiry and discovery of New Occurrences and Secrets in Foreign Estates; *so you must allow Intelligencers and Spials of Nature their bills of Expences*; else you shall never be advertised of many things most worthy to be known. For if *Alexander made such a liberal Assignation of Treasure unto Aristotle,* for Hunters, Fowlers, Fishers, and the like, that he might compile a History of living Creatures; certainly much more is their merit, who wander not in wild forrests of Nature, but make themselves a way through the Labyrinths of Arts.

§ Another Defect to be observed by us (indeed of great import) is, *A neglect, in those which are Governours in Universities, of Consultation; and in Princes and superior Persons, of visitation; to this end, that it may with all diligence be considered and consulted of, whether the Readings, Disputations and other Scholastical exercises, anciently instituted, will be good to continue, or rather to antiquate and substitute others more effectual:* For amongst Your Majesties most wise maxims, I find this, *That in all usages and Præsidents, the times be considered wherein they first began; which if they were weak or ignorant, it derogateth from the Authority of the usage and leaves it for suspect.* Therefore in as much as the usages and orders of Universities, were for most part derived from times more obscure and unlearned than our own, it is the more reason that they be re-examined. In this kind I will give an instance or two for examples sake, in things that seem most obvious and familiar. *It is an usual practice (but in my opinion somewhat preposterous) that Scholars in the Universities, are too early entred in Logick and Rhetorick; Arts indeed fitter for Graduats than Children and Novices.* For these two (if the matter be well weighed) are in the number of the graveſt Sciences, being the *Arts of Arts, the one for Judgment, the other for Ornament.* So likewise they contain Rules and Directions, either for the Disposition or Illustration of any subject or material Circumstance thereof; and therefore for minds empty and unfraught with matter, and which have not as yet gathered that which *Cicero* calls *Sylva* and *Supellex*, that is stuff and variety of things, to begin with those Arts, (as if one would learn to weigh, of measure, or paint the wind) doth work but this effect, that the virtue and strength of these Arts, which are great and Universal, are almost made contemptible, and have degenerated either into *Childish Sophistry or ridiculous Affectation*; or at least have been embased in their reputation. And farther, the untimely and unripe accession to these Arts, hath drawn on, by necessary consequence, a watery and superficiary delivery and handling thereof, as is fitted indeed to the capacities of Children. Another instance which I will set down as an Error now grown inveterate, long agoe in the Universities, and it is this; *That in Scholastical exercises, there useth to be a divorce, very prejudicious, between Invention and Memory: for there the most of their speeches are either, altogether premeditate, so as they are uttered in the very precise form of words they were conceived in, and nothing left to invention; or meerly extemporal, so as very little is left to Memory;* Whereas in Life and Action, there is very little use of either of these apart, but rather of their intermixture; that is, of notes or memorials;

Lucius. B.

and

and of extemporal ſpeech: So as by this courſe, exerciſes are not accommodate to practice, nor the Image anſwereth to the Life: And it is ever a true rule in *exerciſes, that all, as neer as may be, ſhould repreſent thoſe things which in common courſe of life uſe to be practiſed*; otherwiſe they will pervert the motions and faculties of the mind, and not prepare them. The truth whereof is plainly diſcovered, when Scholars come to the Practice of their Profeſſions, or other Actions of Civil life, which when they ſet into, this defect, whereof we ſpeak, is ſoon found out by themſelves, but ſooner by others. But this part, *touching the amendment of the Inſtitutions of the Univerſities*, I will conclude, with the clauſe of *Cæſars* letter to *Oppius*, *Hoc Quemadmodum fieri poſſit, nonnulla mihi in mentem veniunt & multa reperiri poſſunt, de iis rebus, rogo vos, ut cogitationem ſuſcipiatis.*

Cic. Epiſt. Ad Art. lib. IX.

§ Another *Defect* which I note, aſcends a little higher than the precedent: *For as the progreſſion of Learning conſiſteth much in the wiſe Government and inſtitution of Univerſities in particular*; *ſo it would be more advanced, if the Univerſities in general, diſperſed through all Europe, were united in a neerer conjunction and correſpondence by mutual Intelligence.* For there are, as we ſee, many Orders and Societies, which, though they be divided under ſeveral Soveraignties and ſpacious Territories, yet they do contract and maintain a Society and a kind of *Fraternity* one with another; in ſo much that they have their *Provincials* and *Generals*, to whom all the reſt yield obedience. And ſurely as nature creates *Brother-hoods* in *Families*; and Arts Mechanical contract *Brotherhoods in Communalties*; the Anointment of God ſuper-induceth a *brother-hood in Kings and Biſhops*; Vows and Canonical rules unite a *Brother-hood in Orders*; in like manner, there cannot but intervene *a Noble and Generous Fraternity between men by Learning and Illuminations*; reflecting upon that relation which is attributed to God, who himſelf is called, *The Father of Illuminations or Lights.*

Iac. 1.

§ Laſtly, this I find fault with, which I ſomewhat toucht upon before, *that there hath not been, or very rarely been, any publick deſignation of able men, who might write or make inquiry of ſuch parts of Learning as have not been hitherto ſufficiently laboured and ſubdued.* Unto which point it will be very available, if there were erected a kind of *viſitation of Learning*; and a Cenſe or Eſtimate taken, what parts of Learning are rich and well improved; what poor and deſtitute. For *the opinion of Plenty is amongſt the Cauſes of want*; and the multitude of Books makes a ſhew rather of ſuperfluity, than penury. Which ſurcharge, nevertheleſs, if a man would make a right judgement, is not remedied by ſuppreſſing or extinguiſhing books heretofore written, but by publiſhing good new books, which may be of ſuch a right kind, *That, as the Serpent of Moſes, may devour the Serpents of the Enchanters.*

Exod. 7.

§ The Remedies of theſe *defects* now enumerate, except the laſt, and of the laſt alſo, in reſpect of the Active part thereof, which is the *Deſignation of writers*, are *opera Baſilica*, towards which the endeavours and induſtry of a private man, are commonly but as an Image in a croſs way, which may point at the way, but cannot go it: But the *ſpeculative part, which pertaineth to the examination of knowledges*, namely, *what is deficient in every particular Science*, is open to the induſtry of a private man. *Wherefore my deſignment is to attempt a general and faithful*

faithful perambulation and viſitation of Learning; ſpecially with a diligent and exact enquiry, what parts thereof lye freſh and waſte, and are not yet improved and converted to uſe by the induſtry of men; to the end that ſuch a plot made and recorded to memory, may miniſter light both to publick Deſignations, and the voluntary labours of private endeavours. Wherein nevertheleſs my purpoſe is, at this time, *to note only Omiſſions and Deficiencies, and not to make redargution of Errors and Over-ſights*: For it is one thing to ſet forth what ground lieth unmanur'd, and another thing, to correct ill husbandry in that which is manured.

§ In the undertaking and handling of which work I am not ignorant what a buſineſs I move, and what a difficult province I ſuſtain, and alſo, how unequal my abilities are unto my will: yet I have a good hope, that if my extreme love to Learning carry me too far, I may obtain the excuſe of affection, for that, it is *not granted to man, To love and to be wiſe*. I know well that I muſt leave the ſame liberty of judgement to others, that I uſe my ſelf; and intruth, I ſhall be indifferently glad, to accept from others, as to impart that duty of humanity; *Nam qui erranti comiter monſtrant viam*, &c. I do fore-ſee likewiſe, that many of thoſe things which I ſhall enter and regiſter as *Omiſſions* and *Deficients*, will incur divers cenſures; *as*, that ſome parts of this enterpriſe were done long-ago and now are extant; *others*, that they taſte of curioſity, and promiſe no great fruit; *others*, that they are too difficult and impoſſible to be compaſſed by humane induſtries. For the two firſt, let the particulars ſpeak for themſelves: For the laſt, touching *impoſſibility*, I determine thus; All thoſe things are to be held poſſible and performable, which may be accompliſht by ſome perſon, though not by every one; and which may be done by the united labours of many, though not by any one apart; and which may be effected in a ſucceſſion of ages, though not in the ſame age; and in brief, which may be finiſht by the publick care and charge, though not by the ability and induſtry of particular perſons. If, notwithſtanding, there be any man who would rather take to himſelf that of *Solomon*, *Dicit Piger, Leo eſt in via*, than that of *Virgil*. Cic. Offic. 1. ex Ennio. Prov. 22. Æn. 5.

Poſſunt quia poſſe videntur: It is enough to me, if my labours may be eſteemed as votes, and the better ſort of wiſhes: for as it asketh ſome knowledge to demand a queſtion not impertinent; ſo it requireth ſome ſenſe to make a wiſh not abſurd.

CHAP. I.

I. *An univerſal Partition of Humane Learning into,* § *Hiſtory.* II. *Poetry.* III. *Philoſophy.* § *This Partition is taken from the triplicity of Intellective Faculties: Memory: Imagination: Reaſon.* § *The ſame Partition is appropriate to Divine Learning.*

I. THat is the trueſt Partition of humane Learning, which hath reference to the *three Faculties* of Mans ſoul, which is the

ſeat of Learning. *Hiſtory* is referred to *Memory*, *Poeſie* to the *Imagination*, *Philoſophy* to *Reaſon*. By *Poeſie*, in this place, we underſtand nothing elſe, but *feigned Hiſtory*, or Fables. As for *Verſe*, that is only a ſtile of expreſſion, and pertains to the *Art of Elocution*, of which in due place.

§ *Hiſtory is properly of Individuals circumſcribed within time and place:* for although *Natural Hiſtory* ſeem to be converſant about *univerſal Natures*; yet this ſo falls out, becauſe of the promiſcuous ſimilitude in things Natural comprehended under one kind; ſo that if you know one, you know all of that ſpecies. But if any where there be found Individuals, which in their kind are either ſingular, as the *Sun* and the *Moon*; or which do notably digreſs from their kind, as *Monſters*; theſe are as aptly handled in *Natural Hiſtory*, as particular men are in *Civil Hiſtory*. All theſe are referred unto *Memory*.

II. *Poeſie*, in that ſence we have expounded it, *is likewiſe of Individuals, fancied to the ſimilitude of thoſe things which in true Hiſtory are recorded*, yet ſo as often it exceeds meaſure; and thoſe things which in Nature would never meet, nor come to paſs, *Poeſie* compoſeth and introduceth at pleaſure, even as *Painting* doth: which indeed is the work of the Imagination.

III. *Philoſophy* diſmiſſeth Individuals and comprehendeth, not the firſt Impreſſions, but the abſtract Motions thereof, and converſant in compounding and dividing them according to the Law of Nature, and of the things themſelves: And this is wholly the office and operation of *Reaſon*.

§ And that this *Diſtribution* is truly made, he ſhall eaſily conceive that hath recourſe to the Originals of Intellectuals. Individuals only ſtrike the ſenſe, which is the port or entrance of the underſtanding. The Images or Impreſſions of thoſe Individuals accepted from the *ſenſe*, are fixt in the *Memory*, and at firſt enter into it entire, in the ſame manner they were met: afterwards the *underſtanding* ruminates upon them, and refines them, which then it doth either meerly *review*; or in a wanton delight counterfeit and *reſemble*; or by compounding and dividing digeſt and endue them. So it is clearly manifeſt, that from theſe three fountains of *Memory*, of *Imagination* and of *Reaſon*, there are theſe three Emanations, of *Hiſtory*, of *Poeſie*, and of *Philoſophy*, and that there can be no other nor no more: for *Hiſtory* and *Experience*, we take for one and the ſame, as we do *Philoſophy* and *Sciences*.

§ Neither do we think any other Partition than this is requiſite to *Divine Learning*. Indeed the informations of *Oracle* and of Senſe be divers; both in the matter and manner of Conveying, but the ſpirit of Man is the ſame, the Cells and Receptacles thereof the very ſame. For it comes to paſs here, as if divers Liquors, and that by divers Funnels, ſhould be receiv'd into one and the ſame veſſel. Wherefore *Theology* alſo conſiſts either of *Sacred Hiſtory*; of *Parables*, which are a kind of *Divine Poeſie*; or of *Precepts* and *Doctrines*, as an *eternal Philoſophy*. As for that part which ſeems ſupernumerary, which is *Prophecy*, that is a branch of *Hiſtory:* however *Divine Hiſtory* hath that prerogative over *Humane*, that the Narration may be before the Fact as well after.

CHAP.

CHAP. II.

I. The Partition of Hiſtory into *Natural and Civil* (*Eccleſiaſtical and Literary comprehended under Civil.*) II. The Partition of *Natural Hiſtory, into the Hiſtory of Generations.* III. *Præter-Generations.* IV. *Of Arts.*

I. HIſtory is either *Natural or Civil:* in *Natural* the operations of Nature are recorded; in *Civil* the Actions of men. In both theſe without queſtion, the Divine Workings are tranſlucent, but more conſpicuous in *Acts Civil*; in ſo much as they conſtitute a peculiar kind of Hiſtory, which we uſually ſtile *Sacred* or *Eccleſiaſtical:* And in truth to us ſuch ſeems the Dignity of Learning and of Arts to be, that there ought to be reſerv'd a *Particular Hiſtory* for them apart from the reſt; which yet we underſtand to be comprehended, as *Eccleſiaſtick Hiſtory* alſo is, under *Hiſtory Civil.*

II. The Partition of *Natural Hiſtory* we ſhall raiſe out of the ſtate and condition of *Nature* herſelf, which is found ſubject to a triple ſtate, and under a three-fold regiment: For *Nature is either Free and diſplaying her ſelf in her ordinary courſe*; as in the Heavens, living Creatures, Plants, and the Univerſal furniture of the world; or *put out of her uſual courſe and depos'd from her ſtate, by the pravities and inſolencies of contumacious Matter, and the violence of Impediments,* as in Monſters: or laſtly, ſhe is *Compreſt and faſhioned, and as it were new caſt,* as in Artificial Operations: Let therefore the partition of *Natural Hiſtory,* be made into the Hiſtory of *Generations*; of *Præter-Generations,* and of *Arts*; whereof the laſt we uſe to call *Hiſtory Mechanical,* or *Experimental.* The firſt of theſe handles the *Liberty of Nature*; the ſecond the *Errors*; the third the *Bands* thereof. And we are the rather induced to aſſign the *Hiſtory of Arts,* as a branch of *Natural Hiſtory,* becauſe an opinion hath long time gone currant, as if *Art* were ſome different thing from *Nature,* and *Artificial* from *Natural.* From this miſtake this inconvenience ariſes, that many writers of *Natural Hiſtory* think they have quit themſelves ſufficiently, if they have compiled a Hiſtory of *Creatures,* or of *Plants,* or of *Minerals;* the experiments of Mechanical Arts paſt over in ſilence. But there is yet a more ſubtile deceit which ſecretly ſteals into the minds of Men, namely, that *Art* ſhould be reputed a kind of *Additament* only to *Nature,* whoſe virtue is this, that it can indeed either perfect *Nature inchoate, or repair it when it is decayed, or ſet it at liberty from impediments*; *but not quite alter, tranſmute, or ſhake it in the foundations:* which erroneous conceit hath brought in a too haſty deſpair upon mens enterpriſes. But on the the contrary, this certain truth ſhould be throughly ſetled in the minds of men, *That Artificials differ not from Naturals in Form and Eſſence, but in the Efficient only*; for man hath no power over *Nature,* ſave only in her *Motion*; that is, to mingle or put together Natural bodies, and to ſeparate or put them aſunder; wherefore, where there is *Appoſition and Separation of Bodies, Natural conjoyning* (as they term it) *Active with Paſſive,* man may do all things; this not done, he can do nothing. Nor is it

material ſo things be managed in a right order, for the production of ſuch an effect, whether this be done by the Art of Man or without the Art of Man. Gold is ſometimes digeſted and purged from crudities and impurities, by fire; ſometimes found pure in ſmall ſands, Nature performing her own work. So the Rain-Bow is formed of a dewy cloud in the Air above; form'd alſo by aſperſion of water by us below. Therefore Nature commandeth all, and theſe three are her ſubſtitute Adminiſtrators, *The courſe of Nature; the Expatiation of Nature and Art; or the Cooperation of Man with Nature in particulars.* Wherefore it is very proportionable, that theſe three be comprized in Natural Hiſtory, which C. *Plinius* for moſt part performed, who alone comprehended *Natural Hiſtory* according to the dignity thereof; but what he thus comprehended he hath not handled as was meet, nay rather foully abuſed.

C. Plin. Nat. Hiſt.

III. The firſt of theſe is extant in ſome good perfection: *The two latter are handled ſo weakly and ſo unprofitably, that they may be referr'd to the liſt of Deficients.* For you ſhall find no ſufficient and competent collection of thoſe works of *Nature which have a Digreſſion and Deflection from the ordinary courſe of Generations, Productions and Motions*; whether they be the ſingularities of certain Countries and Places, or the ſtrange events of times; or the wit of chance, or the effects of latent proprieties; or *Monodicals of Nature* in their kind. It is true, there are a number of Books more than enough, full fraught with fabulous Experiments, forged Secrets, and frivolous Impoſtures, for pleaſure and ſtrangeneſs; but a ſubſtantial and ſevere *Collection of Heteroclites*, and of the *wonders* of *Nature*, diligently examined and faithfully deſcribed, *this, I ſay, I find not*, eſpecially with due rejection, and, as it were, publick proſcription of untruths and fables, which have got up into credit. For as the matter is now carried, if any untruths touching *Nature* be once on foot and celebrated (whether it be the Reverence of Antiquity, that can thus far countenance them; or that it is a trouble to call them unto a re-examination; or that they are held to be rare ornaments of ſpeech, for ſimilitudes and compariſons) they are never after exterminate and called in. The uſe of this work honour'd with a Preſident in *Ariſtotle*, is nothing leſs than to give contentment to curious and vain wits, as the manner of *Mirabilaries* and the *ſpreaders of invented Prodigies* is to do; but for two reaſons ſerious and grave; the one to correct the partiality of Axioms, which are commonly grounded upon common and popular examples; the other becauſe from the *wonders of Nature*, a fair and open paſſage is made to the *wonders of Art.* For the buſineſs in this matter is no more than by quick ſent to trace out the footings of nature in her wilful wandrings; that ſo afterward you may be able at your pleaſure, to lead or force her to to the ſame place and poſtures again.

* De Mirab.

§ Neither do I give in precept, that ſuperſtitious Narrations of Sorceries, Witch-crafts, Inchantments, Dreams, Divinations, and the like, where there is clear evidence of the fact and and deed done, be altogether excluded from this *Hiſtory of Marvails.* For it is not yet known, in what caſes, and how far, effects attributed to ſuperſtition, do participate of Natural Cauſes; and therefore, howſoever the uſe and practice of theſe Arts, in my opinion, is juſtly to be condemned; yet from the

ſpeculation

ſpeculation and conſideration of them, (if they be cloſely purſued) we may attain a profitable direction; not only for the right diſcerning of offences in this kind of guilty perſons; but for the farther diſcloſing of the ſecrets of Nature. Neither ſurely ought a man to make ſcruple of entring and penetrating the vaults and receſſes of theſe Arts, that propoſeth to himſelf only the inquiſition of *Truth*, as your Majeſty hath confirmed in your own example: For you have with the two clear and quick-ſighted eyes of *Religion and Natural Philoſophy*, ſo wiſely and throughly enlightened theſe *ſhadows*, that you have proved your ſelf moſt like the *Sun* which paſſeth through polluted places, yet is not diſtained. But this I would admoniſh, that theſe *Narrations* which have mixture with *Superſtition*, be ſorted by themſelves, and not be mingled with the *Narrations*, which are purely and ſincerely Natural. As for the Narrations touching the *Prodigies* and *Miracles* of *Religions*, they are either not true; or no way Natural, and therefore pertain not to *Natural Hiſtory*. *K. James his Demonology.*

IV. For Hiſtory of Nature, wrought and ſubdued by the hand, which we are wont to call *Mechanical*, I find indeed ſome collections made of Agriculture, and likewiſe of many *Manual Arts*; but commonly (which in this kind of knowledge is a great detriment) with a neglect and rejection of *Experiments familiar and vulgar*; which yet, to the *interpretation of Nature*, do as much, if not more, conduce, than Experiments of a higher quality. But it is eſteemed a kind of diſhonour and aſperſion unto Learning, if learned men ſhould, upon occaſion perchance, deſcend to the Inquiry or Obſervation of *Matters Mechanical*, except they be reputed for *Secrets of Art, or Rarities, or Subtilties*. Which humour of vain and ſupercilious arrogance, *Plato* juſtly derideth, where he brings in *Hippias* a vaunting Sophiſt, diſputing with *Socrates* a ſevere and ſolid inquiſitor of Truth; where the ſubject being of Beauty, *Socrates* after his wandring and looſe manner of diſputing, brought in firſt an example of a fair Virgin, than of a fair Horſe, than of a fair Pot well glaz'd; at this laſt inſtance *Hippias* ſomewhat mov'd ſaid; *Were it not for courteſie ſake, I ſhould diſdain to diſpute with any that alledged ſuch baſe and ſordid inſtances*; to whom *Socrates*, *You have reaſon, and it becomes you well, being a man ſo trim in your veſtments, and ſo neat in your ſhooes*; and ſo goes on in an Irony. And certainly this may be averr'd for truth, that they be not the higheſt inſtances, that give the beſt and ſureſt information. This is not unaptly expreſt in the Tale, ſo common, of the Philoſopher, *That while he gaz'd upward to the ſtars fell into the water*: for if he had lookt down, he might have ſeen the ſtars in the water; but looking up to heaven he could not ſee the water in the ſtars. In like manner it often comes to paſs that ſmall and mean things conduce more to the diſcovery of great matters, than great things to the diſcovery of ſmall matters; and therefore *Ariſtotle* notes well, *that the Nature of every thing is beſt ſeen in his ſmalleſt Portions*. For that cauſe he enquires the Nature of a Common-wealth, firſt in a Family and the ſimple conjugations of Society, Man and Wife; Parents and Children; Maſter and Servant, which are in every cottage. So likewiſe the Nature of this great City of the world, and the Policy thereof, muſt be ſought in every firſt Concordances and leaſt Portions of things. So we ſee that ſecret of Nature (eſteemed one of the great myſteries) *In Hipp. Major.* *Laert. in Thalete.* *Pol. lib. 1.*

myſteries) of the turning of Iron toucht with a Loadſtone towards the Poles, was found out in needles of Iron, not in bars of Iron.

§ But if my judgement be of any weight, I am wholly of this mind, that the uſe of *Mechanical Hiſtory*, to the raiſing of *Natural Philoſophy*, is of all other the moſt radical and fundamental; ſuch Natural Philoſophy, I underſtand, as doth not vaniſh into the fumes of ſubtile and ſublime ſpeculations, but ſuch, as ſhall be effectually operative to the ſupport and aſſiſtance of the incommodities of mans life: For it will not only help for the preſent, by connecting and transferring the obſervations of one Art, into the uſe of others, which muſt needs come to paſs, when the experiences of divers Arts ſhall fall into the conſideration and obſervation of one man; but farther, it will give a more clear illumination, than hitherto hath ſhined forth, for the ſearching out of the cauſes of things, and the deducing of Axioms. For *like as you can never* well know and prove the diſpoſition of another man, unleſs you provoke him; nor *Proteus* ever changed ſhapes, until he was ſtraitned and held faſt with cords; ſo nature provoked and vexed by Art, doth more clearly Appear, than when ſhe is left free to her ſelf. But before we diſmiſs this part of *Natural Hiſtory*, which we call *Mechanical* and *Experimental*, this muſt be added; That the body of *ſuch a Hiſtory*, muſt be built not only of *Mechanical Arts themſelves*, but the *operative part of Liberal Sciences*, as alſo many practices not yet grown up into Art, that nothing profitable may be omitted, which avails to the information of the underſtanding. And ſo this is the firſt Partition of *Natural Hiſtory*.

Chap. III.

I. The Second Partition of *Natural Hiſtory*, from the uſe and end thereof into *Narrative and Inductive*. And that the moſt noble end of *Natural Hiſtory is, that it miniſter and conduce to the building up of Philoſophy: which end Inductive Hiſtory reſpecteth.* II. The Partition of the *Hiſtory of Generations into the Hiſtory of the Heavens: The Hiſtory of the Meteors: The Hiſtory of the Earth and Sea: The Hiſtory of Maſſive Bodies, or of the greater Corporations: The Hiſtory of Kinds, or of the leſſer Corporations.*

I. *Natural Hiſtory*, as in reſpect of the *ſubject, it is of three ſorts*, as we obſerved before; ſo in reſpect of the *uſe, of two:* for it is applied, either for the knowledge of things themſelves recorded in *Hiſtory*; or as the Primitive matter of *Philoſophy*. The former of theſe, which either for the pleaſure of the Narrations is delighful, or for the practice of experiments is uſeful, and for ſuch pleaſure or profits ſake is purſued, is of far inferiour quality, compared with that which is the Materials and Proviſion of a *true and juſt induction*, and gives the firſt ſuck to *Philoſophy*, wherefore let us again divide *Natural Hiſtory*, into *Hiſtory Narrative*, and *Inductive*; *this latter we report as Deficient.* Nor do the great names of Ancient Philoſophers, or the mighty

volumes

volumes of Modern writers ſo aſtoniſh my ſenſe; for I know very well that *Natural Hiſtory* is already extant, ample for the Maſs, for variety delightful, and often curious for the diligence: but if you take from thence *Fables* and *Antiquity*, and *Allegations of Authors*, and *vain Controverſies*, *Philoſophy* and *Ornaments*, which are accommodate to Table-talk, or the *night-diſcourſes* of Learned men, then will the ſequel, for the *Inſtaurations* of *Philoſophy*, come to no great matter: And to ſpeak truth, this is far ſhort of the variety which we intend. For firſt thoſe two parts of *Natural Hiſtory*, whereof we have ſpoken, The Hiſtory of *Preter-generations*, and *of Arts*, matters of great conſequence, are there *Deficient*: then in that third general Part mentioned before, namely of *Generations*, of five parts thereof, the *Natural Hiſtory* extant gives ſatisfaction only to one.

II. For the *Hiſtory of Generations* hath Five ſubordinate Parts; The firſt is of *Celeſtial Bodies*, which comprehends the *Phænomena* ſincere, and not dogmatiz'd into any peremptory aſſertions: The ſecond of *Meteors* with the *Comets*, and of the *Regions*, as they call them, of the *Air*; neither is there extant any Hiſtory concerning *Comets*, *Fiery Meteors*, *Winds*, *Rain*, *Tempeſts*, and the reſt, of any value: The third is of the *Earth and of the Water* (as they are integral parts of the World) of *Mountains*, of *Rivers*, of *Tydes*, of *Sands*, of *Woods*, as alſo of the *Figure* of the continents, as they are ſtretcht forth: in all theſe particulars the Inquiries and Obſervations are *rather Natural*, *than Coſmographical*: Fourthly, touching the *general Maſſes of Matter*, which we ſtile the *Greater Collegiats*, commonly called the *Elements*: Neither are there found any narrations touching *Fire*, *Air*, *Water*, and of their Natures, Motions, Workings, Impreſſions, which make up any complete body: The fifth and the laſt Part is of *the Perfect and exact Collections*, which we entitle the *leſſer Collegiats*, commonly called *Kinds* or *Specificks*. In this laſt part only the induſtry of writers hath appeared, yet ſo as was prodigally waſted in ſuperfluous matter, ſwelling with the outward deſcriptions of living Creatures, or of Plants and ſuch like; than enricht with ſolid and diligent obſervations, which in *Natural Hiſtory* ſhould every where be annext and interſerted. And to ſpeak in a word, all the *Natural Hiſtory* we have, as well in regard of the Inquiſition, as of the Collection, is no way proportionable in reference, to that end whereof we ſpeak, namely the *Raiſing and advancing of Philoſophy*: Wherefore we pronounce *Inductive Hiſtory Deficient*. And thus far of *Natural Hiſtory*.

CHAP.

Chap. IV.

I. The Partition of *Civil Hiſtory, into Eccleſiaſtical and Literary*, and, which retains the general name, *Civil.* II. *Literary Deficient.* § *Precepts how to compile it.*

I. *Civil Hiſtory*, in our Judgement, is rightly divided into three kinds; firſt into *Sacred* or *Eccleſiaſtical*; then into that which retains the general name *Civil*; laſtly, into that of *Learning* and *Arts.* We will begin with that kind we ſet down laſt, becauſe the other are extant, *but this I thought good to report as Deficient*; it is the *Hiſtory of Learning.* And ſurely the *Hiſtory of the world* deſtitute of this, may be thought not unlike the ſtatue of *Polyphemus*, with his eye out, that part of the Image being wanting, which doth moſt ſhew the nature and ſpirit of the Perſon. And though we ſet down this as *Deficient*, yet we are not ignorant, that in divers particular Sciences of Juris-conſults, Mathematicians, Rhetoricians, Philoſophers, there are made ſome ſlight Memorials and ſmall relations of Sects, Schools, Books, Authors, and ſuch like ſucceſſions of Sciences. There are likewiſe extant, ſome weak and barren diſcourſes touching the *Inventors of Arts and Uſages*; but a Juſt and General *Hiſtory of Learning*, we avouch that none hitherto hath been publiſht. Wherefore we will propound the Argument; the way how to contrive it, and the uſe thereof.

II. *The Argument is nothing elſe but a recital from all Times, what Knowledges and Arts, in what Ages and Climates of the world have flouriſht.* Let there be made a commemoration of their *Antiquities*, *Progreſſions* and *Peragrations*, through divers parts of the World: (for Sciences ſhift and remove, as people do.) Again, of their *Declenſions*, *Oblivions*, and *Inſtaurations.* Let there likewiſe be obſervations taken through all *Arts*, of the *occaſion and original of their Invention*; of their *Manner of delivery*, and the diſcipline of their managings, *Courſe of ſtudy* and exerciſes. Let there alſo be added the *Sects*, then on foot; and the *more famous controverſies* which buſied and exerciſed Learned men; the ſcandals and reproaches to which they lay open; the Lauds and Honours wherewith they were grac'd. Let there be noted the *Chiefeſt Authors*, the *beſt Books*, *Schools*, *Succeſſions*, *Univerſities*, *Societies*, *Colledges*, *Orders*, and whatſoever elſe belongs to the State of Learning. But above all, let this be obſerved (which is the Grace and Spirit of *Civil Hiſtory*,) that the Cauſes and Conſultations be Connexed with the events: namely, that *the nature of Countries and People be recorded, the diſpoſitions apt and able; or inept and inable for divers diſciplines; the Occurrences of time Adverſe, or Propitious to Learning; the zeals and mixtures of Religions; the Diſcountenances, and favours of Laws; and laſtly, the eminent virtues and ſway of Perſons of note, for the promoting of Learning; and the like.* But our advice is, that all theſe points be ſo handled, that time be not waſted in praiſe and cenſure of particulars, after the manner of *Criticks*; but that things be plainly and hiſtorically related, and our own judgements very ſparingly interpoſed.

§ *As*

§ *As for the manner of compiling ſuch a Hiſtory*, we do eſpecially admoniſh thus much; *that the Matter and Proviſion thereof be drawn, not only from Hiſtories and Criticks; but alſo that through every century of years or leſſer Intervals, by a continued ſequence of time, deduced from the higheſt antiquity; the beſt Books written within thoſe diſtinguiſht ſpaces of time be conſulted with*; that from a taſte and obſervation of the argument, ſtile and method thereof, and not a through a peruſal, for that *were an infinite work, the learned ſpirit of that age, as by a kind of charm, may be awakt and rais'd up from the dead.*

§ *As touching the uſe of this Work*, it is deſign'd to this end; not, that the Honour and State of Learning uſher'd in by ſo many Images and Ghoſts of the Learned, ſhould be celebrated, or that for the earneſt affection we bear to Learning, we deſire, even to a curioſity, to enquire and know, and to conſerve whatſoever to the ſtate of Learning may any way appertain; but chiefly, for a more ſerious and grave purpoſe. It is, in few words this, *For that ſuch a Narration, as we have deſcribed, in our opinion, may much confer to the wiſdom and judgement of Learned men, in the uſe and adminiſtration of Learning: and that the paſſions and perturbations; the vices and virtues; as well about Intellectual matters, as Civil may be obſerved; and the beſt Preſidents for practice may be deduced therefrom.* For it is not Saint *Auſtins*, nor Saint *Ambroſe* his works, (as we ſuppoſe) that will make ſo wiſe a Biſhop or a Divine, as *Eccleſiaſtical ſtory* throughly read and obſerved: which without queſtion may befal Learned men from the Hiſtory of Learning. For whatſoever is not munited and ſuſtained by Example and Records, is expoſed to imprudency and ruine. Thus much of the *Hiſtory of Learning.*

CHAP. V.

Of the Dignity. § *And difficulty of Civil Hiſtory.*

CIvil Hiſtory properly ſo called comes now to be handled; The *Dignity and Authority whereof*, is very eminent among ſecular writings: For upon the credit of *this Hiſtory*, the examples of our Anceſtors; the viciſſitudes of Affairs; the grounds of Civil Prudence; and the Name and Fame of men depend.

§ But the *Difficulty is as great as the Dignity*; for to draw back the mind in writing, to the contemplation of matters long ago paſſed; and thus, as it were, to make it aged; to ſearch out with diligence; and to deliver with faith and freedom, and with the life and height of expreſſion; to repreſent unto the eyes, the changes of times; the characters of Perſons; the incertainties of Counſels; the Conveyances of Actions (as of waters,) the ſubtilties of Pretentions, the ſecrets of State, is a task of great pains and judgements; eſpecially ſeeing Ancient reports, are ſubject to incertainty; Modern liable to danger: Wherefore the errors are many which attend *Civil Hiſtory*; whilſt ſome write poor and popular Relations, the very reproach of Hiſtory;

others patch up, in a rash haste, and unequal contexture, particular Reports, and brief Memorials, others slightly run over the heads of actions done; others on the contrary pursue every trivial Circumstance, nothing belonging to the sum and issue of things; some out of a too partial indulgence to their own wit, take confidence to fain many things; but others add and imprint upon affairs the Image, not so much of their own wit, as of their affections; mindful rather of their own parts, than to become Religious deponents for truth; others every where interlace such Politick observations; as they most fancy, and seeking occasion of digression for ostentation, too slightly break off the contexture of the discourse; others for want of moderation and judgement over do things, by the prolixity of their speeches, Harangues or other performances, so as it is sufficiently manifest, that in the writings of men, *there is not any kind more rare than a just History, and in all points complete and perfect.* But our purpose at this present is, to set down a partition of knowledge, *for the observation of parts omitted; and not a censure of parts erroneous.* Now we will proceed *to the Partitions of Civil History*, and those of divers sorts; for the particular kinds will be less intangled, if divers partitions be propounded; than if one partition by divers members be curiously drawn out.

CHAP. VI.

The first Partition of Civil History, *into* § *Memorials.* § *Antiquities.* § *And Perfect History.*

Civil History is of three kinds, not unfitly to be compared to the three sorts of Pictures or Images: for of Pictures and Images we see, some are unperfect and unfinisht; others perfect; and others decayed and defaced with Age. In like manner we will divide *Civil History, which is the Image of Actions and Times*, into three kinds, agreeable to those of Pictures; namely, *Memorials*; *Perfect History*; and *Antiquities. Memorials are Histories unfinisht*, or the first and rough draughts of History: *Antiquities are Histories defaced*, or the Remains of History, which have casually escaped the shipwrack of Time.

§ *Memorials or Preparations to History*, are of two sorts, whereof one may be termed *Commentaries*; the other *Registers. Commentaries* set down a naked Continuance and Connexion of Actions and Events, without the Causes and Pretexts of Busines; the beginnings and Motives thereof; also the Counsels and Speeches, and other preparations of Actions: For this is the true nature of *Commentaries*, though *Cæsar* in modesty mixt with greatness, did for his pleasure apply the name of *Commentaries*, to the best History that is extant. But *Registers* are of two sorts, for either they comprehend the titles of Matter and Persons in a continuation of Times, such as are *Calendars* and *Chronologies:* or *Solennities* of *Acts*; of which kind are the Edicts of Princes; the Decrees of Councils; the Proceedings of Judgements; Pub-

Publick Orations; Letters of Eſtate, and the like; without the Contexture or Continued thred of the *Narration.*

§ *Antiquities*, or the *Remains of Hiſtories*, are as we ſaid, *tanquam Tabula Naufragii*; when induſtrious and underſtanding perſons (the memory of Things being decayed, and almoſt overwhelmed with oblivion) by a conſtant and ſcrupulous diligence, out of Genealogies, Calendars, Inſcriptions, Monuments, Coyns, Proper Names and Styles; Etymologies of words, Proverbs, Traditions, Archives and Inſtruments, as well publick as private; Fragments of ſtories, ſcattered paſſages of Books that concern not Hiſtory; out of all theſe, I ſay, or ſome of them, they recover and ſave ſomewhat from the Deluge of Time. Certainly a painful work, but acceptable to all ſorts of Men, and atttended with a kind of Reverence, and indeed worthy (all Fabulous Originals of Nations defac'd, and extinguiſht) to be ſubſtituted in the room of ſuch counterfeit ſtuff: but yet of the leſs Authority, becauſe what is proſtitute to the licenſe of private deſigns, loſes the honour of publick regard. In theſe kinds of *Imperfect Hiſtories*, I deſign no Deficience, ſeeing they are *tanquam imperfectè miſta*, ſo as ſuch Defects are but their nature. As for *Epitomes the corruptions, certainly, and the Moths of Hiſtories*, we would have them baniſht (wherein we concur with many of moſt ſound judgement) as thoſe that have fretted and corroded the ſound bodies of many excellent Hiſtories; and wrought them into baſe and unprofitable dregs.

CHAP. VII.

The Partition of Perfect Hiſtory, into *Chronicles of Times*; *Lives of Perſons*; *Relations of Acts.* § The Explication *of the Hiſtory of Lives.* § *Of Relations.*

JUſt or *Perfect Hiſtory* is of three kinds, according to the nature of the object which it propounds to repreſent; for it either repreſents a portion of Time; or ſome memorable Perſon; or ſome Famous Act: The firſt we call *Chronicles* or *Annals*; the ſecond *Lives*; the third *Relations.* Of theſe, *Chronicles* ſeem to excel, for Celebrity and Name; *Lives*, for profit and examples; *Relations*, for ſincerity and verity. *For Chronicles, repreſent the magnitude of publick Actions, and the extern faces of Men, as they regard the publick, and involve in ſilence ſmaller Paſſages, which pertain either to Matter or Men.* And ſeeing it is the workmanſhip of God alone, *to hang the greateſt weight upon the ſmalleſt wyers*; it comes many times to paſs, that ſuch a Hiſtory purſuing only the greater occurrences, rather ſets forth the Pomp and Solemnity, than the true reſorts, and the intrinſick contextures of buſineſs. And although it doth add and intermix the Councils themſelves; yet affecting greatneſs, it doth beſprinkle mens actions with more ſolemnneſs and wiſdom, than indeed is in them; *that a Satyre may be a truer table of a Mans life, than many ſuch Hiſtories.* Contrariwiſe; *Lives*, if they be well written with diligence and judgement (for we do not ſpeak of *Elogies*, and ſuch ſlight commemorations) although they propound un-

to themſelves ſome particular perſon, in whom Actions, as well commune as ſolemn; ſmall as great; private as publick, have a compoſition and commixture; yet, certainly, they exhibit more lively and faithful Narrations of Matters; and which you may more ſafely and ſucceſsfully transferr into example. But ſpecial *Relations of Actions*, ſuch as are the *wars of Peloponneſus*; the *Expedition of Cyrus*; the *Conſpiracy of Cataline*, and the like, ought to be attired with a more pure and ſincere Candor of Truth than the *Perfect Hiſtories of Times*; becauſe in them may be choſen au Argument more particular and comprehenſible; and of that quality, as good notice and certitude, and full information, may be had thereof: whereas, on the contrary, the *ſtory of Time* (ſpecially more ancient than the age of the writer) doth often fail in the memory of things, and containeth blank ſpaces, which the wit and conjecture of the writer (confidently enough) uſeth to ſeize upon and fill up, Yet this which we ſay, touching the ſincerity of *Relations*, muſt be underſtood with reſervation, for indeed it muſt be confeſſed (ſince all mortal good laboureth of imperfection, and conveniences with diſconveniences are uſually connext) that ſuch kind of *Relations*, ſpecially if they be publiſhed about the times of things done; ſeeing very often they are written with paſſion or partiality, of all other narrations, are deſervedly moſt ſuſpected. But again, together with this inconvenience, this remedy groweth up; that theſe ſame *Relations*, being they are not ſet out by one ſide only, but through faction and partiary affections are commonly publiſhed by ſome or other on both ſides; they do by this means open and hedge in a middle way between extremes to truth: and after the heat of paſſions is over, they become, to a good and wiſe writer of Hiſtory, not the worſt matter and ſeeds of a perfect Hiſtory.

§ As touching thoſe points which ſeem *deficient* in theſe three kinds of Hiſtory, without doubt there are many particular Hiſtories (of ſuch I ſpeak as may be had) of ſome dignity or mediocrity, which have been hitherto paſſed by, to the great detriment of the honour and fame of ſuch Kingdoms and States, to which they were due, which would be too tedious here to obſerve. But leaving the ſtories of forreign Nations, to the care of Forreign Perſons, leſt I ſhould become *Curioſus in aliena Repub.* I cannot fail to repreſent unto Your Majeſty the indignity and unworthineſs of the *Hiſtory* of *England*, as it now is, in the main continuation thereof, as alſo the partiality and obliquity of that of *Scotland*, in the lateſt and largeſt author thereof: ſuppoſing that it would be honour to Your Majeſty, and a work acceptable with Poſterity, if this Iſland of *Great Britany*, as it is now joyned in a Monarchy for the Ages to come, ſo were joyned in one Hiſtory for the times paſt, after the manner of the ſacred Hiſtory, which draweth down the ſtory of the Ten Tribes, and of the two Tribes as Twins together. And if it ſhall ſeem that the weight of the work; (which certainly is great and difficult) may make it leſs exactly, according to the worthineſs thereof, performed; behold an excellent period of much ſmaller compaſs of time, as to the ſtory of *England*; that is to ſay, from the uniting of the Roſes to the uniting of the Kingdoms; a ſpace of time, which in my judgment contains more variety of rare events, than in like number of ſucceſſions ever was known in an Hereditary Kingdome.

For

For it begins with the mixt Title to a Crown, partly by might partly by right: An entry by Arms; an eſtabliſhment by marriage; ſo there followed times anſwerable to theſe beginnings; like waves after a great tempeſt, retaining their ſwellings and agitations, but without extremity of ſtorm; but well paſt through by the wiſdom of the Pilot, *being one of the moſt ſufficient Kings of all his Predeceſſors.* Then followed a King whoſe Actions conducted rather by raſhneſs, than counſel, had much intermixture with the affairs of Europe; ballancing and inclining them according as they ſwayed; In whoſe time began that *great Alteration in the Eccleſiaſtical State*; ſuch as very ſeldom comes upon the Stage. Then followed the Reign of a Minor; then an Offer of an Uſurpation, though it was very ſhort, *like a Fever for a day:* Then the Reign of a woman matcht with a Forreigner: Again, of a woman that liv'd ſolitary and unmarried. And the cloſe of all was this happy and glorious event; that is, that this Iſland divided from all the world, ſhould be united in it ſelf; by which that ancient Oracle given to *Æneas*, which preſaged reſt unto him; *Antiquam exquirite Matrem*; ſhould be fulfill'd upon the moſt noble Nations of England and Scotland, now united in that name of *Britannia, their ancient Mother*; as a Pledge and Token of the Period and Concluſion, now found of all Wandrings and Peregrination. *So that as maſſive bodies* once ſhaken, feel certain Trepidations before they fix and ſettle; ſo it ſeems probable, that by the Providence of God, it hath come to paſs, *That this Monarchy, before it ſhould ſettle and be eſtabliſh'd in your Majeſty and your Royal Progeny,* (in which I hope it is firm fixt for ever) *it ſhould undergoe ſo many changes, and viciſſitudes, as preluſions of future Stability.*

Hen. VII. *Hen.* VIII. *Ed.* VI. *Maria Eliſa.* Virg. Æn. 3. Iacobus R. Caro. Ius. R.

§ As *for Lives*, when I think thereon, I do find ſtrange that theſe our Times have ſo little known, and acknowledged their own virtues; *being there is ſo ſeldom any Memorials or Records of the lives of thoſe who have been eminent our times.* For although Kings and ſuch as have abſolute ſoveraignty, may be few; and Princes in free Common-wealths (ſo many States being collected into Monarchies,) are not many; yet however, there hath not been wanting excellent men (though living under Kings,) that have deſerv'd better, than an incertain and wandring Fame of their memories; or ſome barren and naked Elegie. For herein the invention of one of the late Poets, whereby he hath well enricht the ancient Fiction, is not inelegant: *He fains that at the end of the Thread of every mans life, there was a Medal or Tablet, whereon the name of the Dead was ſtampt*; and that time waited upon the ſhears of the fatal Siſter, and as ſoon as the Thread was cut, caught the Medals, and carrying them away; a little after threw them out of his Boſom into the River Lethe. And that about the Bank there were many Birds flying up and down, that would get the Medals; and after they had carried them in their beaks a little while, ſoon after, through negligence ſuffered them to fall into the River. Amongſt theſe Birds there were a few *ſwans* found, which if they got a Medal with a name, they uſed to carry it to a certain *Temple conſecrate to Immortality.* But ſuch *ſwans* are rare in our Age: And although many men more mortal in their vigilances and ſtudies, than in their bodies, deſpiſe the *Memory of their Name*, as if it were fume or air, *Animæ nil magnæ laudis egentes:* namely whoſe Philoſophy and ſeverity ſprings from that root, *Non pri-*

Plin. Iun. alicubi in Epiſt.

mus

us laudes contempſimus quam laudanda facere deſcivimus. Yet that will
Prov. 10: not with us, prejudicate *Salomon's* Judgment, *The memory of the Juſt is with Benediction; but the name of the wicked ſhall putrifie:* The one perpetually flouriſhes; the other inſtantly departs into Oblivion; or diſſolves into an ill Odour. And therefore in that ſtile and form of ſpeaking, which is very well brought in uſe, attributed to the Dead, of *Happy Memory*; of *Pious Memory*; of *Bleſſed Memory*; we ſeem to acknowledge that which *Cicero* alledgeth; borrowing it from *Demoſthenes, Bonam Famam propriam eſſe poſſeſſionem defunctorum*; which poſſeſſion I cannot but note that in our age it lyes much waſt and neglected.

§ *As concerning Relations* it could be in truth, wiſh'd, that there were a greater diligence taken therein: For there is no Action more eminent, that hath not ſome able Pen to attend it, which may take and tranſcribe it. And becauſe it is a Quality not common to all men to write a *Perfect Hiſtory* to the life and Dignity thereof; (as may well appear by the ſmall number, even of mean Writers in that kind) yet if particular Actions were but by a tolerable Pen reported, as they paſs, it might be hoped that in ſome after Age, Writers might ariſe, that might compile a *Perfect Hiſtory* by the help and aſſiſtance of ſuch *Notes:* For ſuch *Collections* might be as a *Nurſery Garden*, whereby to Plant a fair and ſtately Garden, when time ſhould ſerve.

Chap. VIII.

The Partition of *the Hiſtory of Times, into Hiſtory Univerſal; and Particular. The Advantages and Diſadvantages of both.*

THE Hiſtory of Times is either Univerſal; or Particular: This comprehends the affairs of ſome Kingdom; or State; or Nation: That, the affairs of the whole world. Neither have there been wanting thoſe, who would ſeem to have compoſed a *Hiſtory of the world*, even from the Birth thereof; preſenting a miſcellany of matter and compends of *Reports* for *Hiſtory*. Others have been confident that they might comprize, as in a Perfect *Hiſtory*, the Acts of their own times, memorable throughout the world; which was certainly a generous attempt, and of ſingular uſe. For the actions, and negotiations of men, are not ſo divorced through the diviſion of Kingdoms, and Countries; but that they have many coincident Connections: wherefore it is of great import to behold the fates, and affairs deſtinate to one age or time drawn, as it were, and delineate in one *Table*. For it falls out that many writings not to be deſpiſed (ſuch as are they whereof we ſpake before, *Relations*) which perchance otherwiſe would periſh; nor often come to the Preſs; or at leaſt the chief heads thereof might be incorporated into the body of ſuch a *General Hiſtory*, and by this means be fixed and preſerved. Yet notwithſtanding if a man well weigh the matter, he ſhall perceive that the Laws of a *Juſt Hiſtory* are ſo ſevere and ſtrict, as they can hardly be obſerv'd in ſuch a vaſtneſs of Argument; ſo that the Majeſty of *Hiſtory* is rather miniſht, than amplified by the greatneſs of the Bulk.

For

For it comes to pass that he who every where pursueth such variety of matter; the precise strictness of Information by degrees slackned; and his own diligence dispersed in so many things, weakned in all, takes up popular Reports and Rumours; and from *Relations* not so authentick, or some other such like slight stuff, compiles a *History*. Moreover he is forced (lest the work should grow too voluminous) purposely to pass over many occurrences worth the relating; and many times to fall upon the way of Epitomes and abridgments. There is yet another danger of no small importance, which such a work is liable unto, which is directly opposed to the profitable use of *Universal History*; for as General History preserves some *Relations*, which, it may be, otherwise would be lost; so contrarywise many times it extinguishes other fruitful *Narrations* which otherwise would have lived through *Breviaries*, which are ever accepted in the world.

Chap. IX.

Another Partition *of the History of Times into Annals and Journals.*

THE Partition *of the History of Time* is likewise well made into *Annals*; and *Journals*: Which Division, though it derive the names from the *Period of Times*, yet pertains also to the choice of Business. For *Tacitus* saith well, when falling upon the mention of the magnificence of certain structures, presently he adds; *Ex dignitate Populi Ro. repertum esse, res illustres, Annalibus; Talia, Diurnis urbis Actis mandari*: Applying to *Annals*, Matters of State; to *Diaries*, Acts and Accidents of a meaner nature. And in my judgment a Discipline of Heraldry would be to purpose in the disposing of the merits of Books; as of the merits of Persons. For as nothing doth more derogate from Civil Affairs, than the confusion of Orders and Degrees; so it doth not a little embase the authority of a grave *History*, to intermingle matters of trivial consequence, with matters of State; such as are Triumphs, and Ceremonies, Shews, and Pageants, and the like. And surely it could be wisht that this distinction would come into Custom. In our Times *Journals* are in use only in Navigations, and Expeditions of war. Amongst the Ancients it was a point of Honour to Princes to have the Acts of their Court referr'd to *Journals*. Which we see was preserv'd in the reign of *Ahasuerus* King of *Persia*, who, when he could not take rest, call'd for the Chronicles; wherein he reviewed the Treason of the Evnuches past in his own time. But in the *Diaries* of *Alexander* the Great, such small Particularities were contained, that if he chanc'd but to sleep at the Table, it was Registred. For neither have *Annals* only compriz'd grave matters; and *Journals* only light; but all were promiscuously, and cursorily taken in *Diaries*; whether of greater, or of lesser Importance:

Annal. 13.

Lib. Esth. Cap 6.

Plutarch Symp. 1.

CHAP.

CHAP. X.

A Second Partition of Hiſtory Civil, *into* Simple, *and* Mixt. § Coſmography *a mixt Hiſtory.*

THe laſt Partition of *Civil Hiſtory* may be this. *Hiſtory Simple*, and *Mixt*. The Commune Mixtures are two, the one from *Civil Knowledge*; the other ſpecially from *Natural*: For there is a kind of writing introduc'd by ſome, to ſet down their Relations, not continued according to the Series of the *Hiſtory*; but pickt out, according to the choice of the Author, which he after re-examines, and ruminates upon; and taking occaſion from thoſe ſelected pieces, diſcourſes of Civil Matters. Which kind of *Ruminated Hiſtory*, we do exceeding well allow of; ſo ſuch a Writer do it indeed, and profeſs himſelf ſo to do. But for a man reſolvedly writing a *Juſt Hiſtory*, every where to ingeſt *Politick inter-lacings*; and ſo to break off the thread of the *ſtory*, is unſeaſonable and tedious. For although every wiſe Hiſtory be full, and as it were impregnant with Political Precepts and Counſels; yet the Writer himſelf ſhould not be his own *Mid-wife* at the delivery.

§ *Coſmography* likewiſe is a *mixt-Hiſtory*, for it hath from *Natural Hiſtory*, the Regions themſelves, and their ſite and commodities; from *Civil Hiſtory*, Habitations, Regiments and Manners; from the *Mathematicks*, Climates, and the Configurations of the Heavens, under which the Coaſts and Quarters of the World do lye. In which kind of *Hiſtory* or Knowledge, we have cauſe to Congratulate our Times; for the world in this our age, hath through-lights made in it, after a wonderful manner. The Ancients certainly had knowledge of the *Zones*, and of the *Antipodes*;

Virg. Geor. 1. (*Noſq; ubi Primus Equis Oriens afflavit anhelis,*
Illic ſera Rubens accendit Lumina veſper)

and rather by Demonſtrations than by Travels. But for ſome ſmall keel to emulate Heaven it ſelf; and to Circle the whole Globe of the Earth, with a more oblique and winding Courſe, than the Heavens do; this is the glory and prerogative of our Ages. So that theſe Times may juſtly bear in their *word*, not only *Plus ultra*, whereas the Ancients uſed *non ultra*; and alſo *imitabile fulmen*, for the Ancients *non imitabile fulmen*.

Virg. Æn. 6. *Demens qui Nimbos & non imitabile Fulmen.*

But likewiſe that which exceeds all admiration *imitabile Cœlum*, our voyages; to whom it hath been often granted to wheel and role about the whole compaſs of the Earth, after the manner of Heavenly Bodies. *And this excellent felicity in Nautical Art, and environing the world, may plant alſo an expectation of farther Proficiencies and Augmentations*

tations of Sciences; specially seeing it seems to be decreed by the Divine Council, that these two should be Coevals, for so the Prophet *Daniel* speaking of the latter times fore-tells, *Plurimi pertransibunt & augebitur Scientia:* as if the through Passage, or Perlustration of the World, and the various propagation of knowledge were appointed to be in the same Ages; as we see it is already performed in great part; seeing our times do not much give place for Learning to the former two *Periods*, or *Returns* of Learning; the one of the *Grecians*; the other of the *Romans*; and in some kinds far exceed them. Cap. 12.

Chap. XI.

I. The Partition of *Ecclesiastical History*, into the *General History of the Church.* II. *History of Prophesie.* III. *History of Providence.*

History Ecclesiastical falls under the same division commonly with *Civil History*; for there are *Ecclesiastical Chronicles*; there are *Lives* of *Fathers*; there are *Relations* of *Synods*, and the like, pertaining to the *Church.* In proper expression this kind of History is divided, *into the History of the Church by a general name, History of Prophesie; and History of Providence.* The first recordeth the times and different state of the *Church Militant*; whether she flote as the *Ark in the Deluge*; or sojourn *as the Ark in the Wilderness*; or be at the rest *as the Ark in the Temple*; that is, the State of the Church in *Persecution*; in *Remove*; and in *Peace.* In this Part I find no *Deficience*; but rather more things abound therein, than are wanting; only this I could wish, that the virtue and sincerity of the Narrations were answerable to the greatness of the Mass.

II. The Second Part which is the *History of Prophesie*, consisteth of two Relatives; the *Prophesie it self*; and the *accomplishment thereof:* wherefore the design of this work ought to be, that every *Prophesie of Scripture* be sorted with the truth of the event; and that throughout all the ages of the world; both for Confirmation of Faith; as also to plant a Discipline; and skill in the Interpretation of *Prophesies*, which are not yet accomplisht. But in this work, that latitude must be allowed which is proper, and familiar unto *Divine Prophesies*; that their accomplishments may be both perpetual and punctual: For they resemble the nature of their Author, *to whom one day is as a thousand years, and a thousand years are but as one day:* And though the fulness and height of their complement be many times assigned to some certain age, or certain point of time, yet they have nevertheless many stairs and scales of Accomplishment throughout divers Ages of the world. This work I set down as *Deficient*; but it is of that nature as must be handled with great wisdom, sobriety, and reverence, or not at all. Psal. 90.

III. The third Part which is the *History* of *Providence* hath fallen indeed upon the Pens of many pious Writers, but not without siding

of Partiaries; and it is imployed *in the observation of that divine Correspondence which often interveneth between Gods revealed Will, and his secret Will.* For though the Counsels and Judgements of God be so obscure, that they are *inscrutable to the Natural man*; yea, many times withdraw themselves even from *their* eyes, that look out of the Tabernacle: Yet sometimes by turns it pleaseth the Divine wisdom for the Confirmation of *this*; and Confutation of those which are *as without God in the world*; to purpose them to be seen written in such Capital Letters, that, as the Prophet speaketh, *Every one that runs by, may read them*; that is, *that men meerly Sensual and Carnal; who make haste to post over those divine Judgements; and never fix their cogitations upon them: yet though they are upon the speed, and intend nothing less, they are urg'd to acknowledge them.* Such as are late, and unlooked for Judgements; unhoped for Deliverances suddenly shining forth; the divine Counsels, passing through such Serpentine windings, and wonderful mazes of things; at length manifestly disintangling and clearing themselves. Which serve not only for the Consolation of the minds of the Faithful; but for the Astonishment and Conviction of the Consciences of the Wicked.

1 Cor. 2.

Ad Ephes. 2.

Habac. 2.

CHAP. XII.

The Appendices *of History Conversant about the words of Men, as History it self about the Deeds:* The Partition thereof into, *Orations.* § *Letters.* § *And Apophthegms.*

BUt not the *Deeds only, but the Words also of Men, should be retained in Memory.* It is true that sometimes *Words* are inserted into the History it self, so far as they conduce to a more perspicuous, and solemn Delivery of *Deeds.* But *the sayings and words of men,* are preserved properly in Books of *Orations*; *Epistles*; and *Apophthegms.* And certainly the *Orations,* of wise men made touching business, and matters of grave and deep importance, much conduce, both to the knowledge of things themselves; and to Elocution.

§ But yet greater Instructions for Civil Prudence, are from the *Letters of great Personages*, touching the Affairs of State. And of the *words of men,* there is nothing more sound and excellent, than are *Letters*; for they are *more natural than Orations*; *more advised than suddain Conferences.* The same *Letters,* when they are continued according to the sequel of times (as is observed in those sent by Embassadors, Governours of Provinces, and other Ministers of Estate) are without Question of all other *the most precious provision for History.*

§ Neither are *Apophthegms* only for delight, and ornament; but for real Businesses; and Civil Usages, for they are, as he said, [a] *Secures aut mucrones verborum,* which by their sharp edge cut and penetrate the knots of Matters and Business: And Occasions run round in a Ring; and what was once profitable, may again be practis'd; and again be effectual, whether a man speak them as ancient; or make them his own.

[a] Cic. Epist. Fam. l. IX.

own. Neither can it be doubted but that is useful in Civil negotiations, which [a] *Cæsar* himself hath honour'd by his own example; it is pity his book is lost, seeing what we have in this kind, seems to be collected with little choice. *Thus much of History*, namely of that part of Learning, which answereth to one of the Cells, or Domicils of the understanding, which is, *Memory*.

[a] Etiam & tu Inclite Heros.

CHAP. XIII.

The Second Principal Part of Humane Learning Poesie; I. *The Partition of* Poesie into Narrative. II. Dramatical. III. And Parabolical. § *Three Examples of* Parabolical Poesie *propounded*, IV. Natural. V. Political. VI. Moral.

NOw let us proceed to *Poesie*. *Poesie is a kind of Learning in words restrained; in matter loose and licens'd*; so that it is referred, as we said at first, to the *Imagination*; which useth to devise, and contrive, unequal and unlawful Matches and Divorces of things. And *Poesie*, as hath been noted, is taken in a double sence; *as it respects Words*; *or as it respects Matter*. In the *first sence*, it is a kind of Character of speech; for *Verse*, is a kind of Stile and Form of Elocution, and pertains not to *Matter*; for a *true Narration* may be composed in *Verse*; and a *Feigned in Prose*. In the *latter sence*, we have determined it, a *Principal member of Learning*, and have placed it next unto *History*; seeing it is nothing else than *Imitation of History at pleasure*. Wherefore searching and pursuing in our Partition the true veins of Learning; and in many points, not giving place to custom, and the *received Divisions*; we have dismissed *Satyrs*, and *Elegies*, and *Epigramms*, and *Odes*, and the like, and referred them to *Philosophy* and *Arts of Speech*. Under the name of *Poesie*, we treat only of *History Feigned at Pleasure*.

I. The truest *Partition of Poesie*, and most appropriate, besides those Divisions common to it with History (for there are *feign'd Chronicles*, *feign'd Lives*, and *feign'd Relations*) is this, *that it is either Narrative; or Representative, or Allusive: Narrative is a meer imitation of History*, that in a manner deceives us; but that often it extols matters above belief. *Dramatical or Representative, is as it were a visible History*; for it sets out the Image of things, as if they were Present; and *History*, as if they were Past. *Parabolical or Allusive is History with the Type, which brings down the Images of the understanding to the Objects of Sense*.

§ As for *Narrative Poesie*, or if you please *Heroical*, (so you understand it of the *Matter*, not of the *Verse*) it seems to be raised altogether from a noble foundation; which makes much for the Dignity of mans Nature. For seeing this sensible world, is in dignity inferiour to the soul of Man; *Poesie* seems to endow Humane Nature with that which *History* denies; and to give satisfaction to the Mind, with, at least, the shadow of things, where the substance cannot be had. For if the matter be throughly considered; a strong Argument may be drawn from *Poesie*, that a more stately greatness of things; a more per-

fect Order; and a more beautiful variety delights the ſoul of Man, than any way can be found in Nature, ſince the Fall. Wherefore ſeeing the Acts and Events, which are the ſubject of true *Hiſtory*, are not of that amplitude, as to content the mind of Man; *Poeſie* is ready at hand to feign *Acts* more *Heroical*. Becauſe *true Hiſtory* reports the ſucceſſes of buſineſs, not proportionable to the merit of Virtues and Vices; *Poeſie* corrects it, and preſents Events and Fortunes according to deſert, and according to the Law of Providence: becauſe *true Hiſtory*, through the frequent ſatiety and ſimilitude of Things, works a diſtaſt and miſpriſion in the mind of Man; *Poeſie* cheereth and refreſhes the ſoul; chanting things rare, and various, and full of viciſſitudes. So as *Poeſie* ſerveth and conferreth to Delectation, Magnanimity and Morality; and therefore it may ſeem deſervedly to have ſome Participation of Divineneſs; becauſe it doth raiſe the mind, and exalt the ſpirit with high raptures, by proportioning the ſhews of things to the deſires of the mind; and not ſubmitting the mind to things, as *Reaſon* and *Hiſtory* do. And by theſe allurements, and congruities, whereby it cheriſheth the ſoul of man; joyned alſo with conſort of Muſick, whereby it may more ſweetly inſinuate it ſelf, it hath won ſuch acceſs, that it hath been in eſtimation even in rude times, and Barbarous Nations, when other Learning ſtood excluded.

II. *Dramatical, or Repreſentative Poeſie, which brings the World upon the ſtage*, is of excellent uſe, if it were not abuſed. For the Inſtructions, and Corruptions of the *Stage*, may be great; but the corruptions in this kind abound; the Diſcipline is altogether neglected in our times. For although in Modern Common-wealths, *Stage-playes* be but eſteemed a ſport or paſtime, unleſs it draw from the Satyr, and be mordent; yet the care of the Ancients was, that it ſhould inſtruct the minds of men unto virtue. Nay, wiſe men and great Philoſophers have accounted it, as the Archet, or muſical Bow of the Mind. And certainly it is moſt true, and as it were, a ſecret of nature, *that the minds of men are more patent to affections, and impreſſions, Congregate, than ſolitary.*

III. But *Poeſie Alluſive, or Parabolical, excels the reſt, and ſeemeth to be a ſacred and venerable thing; eſpecially ſeeing Religion it ſelf hath allowed it in a work of that nature, and by it, traficks divine commodities with men.* But even *this* alſo hath been contaminate by the levity and indulgence of mens wits about *Allegories*. And it is of ambiguous uſe, and applied to contrary ends. For it ſerves for *Obſcuration*; and it ſerveth alſo for *Illuſtration*: in this it ſeems, there was ſought a way how to teach; in that an Art how to conceal. And this way of teaching, which conduceth to *Illuſtration*, was much in uſe in the Ancient times: for when the inventions and concluſions of humane reaſon, (which are now common and vulgar) were in thoſe ages ſtrange and unuſual; the underſtandings of men were not ſo capable of that ſubtilty, unleſs ſuch diſcourſes, by reſemblances and examples, were brought down to ſenſe. Wherefore in thoſe firſt ages all were full of *Fables*, and of *Parables*, and of *Ænigmaes*, and of *Similitudes* of all ſorts. Hence the *Symboles* of *Pythagoras*; the *Ænigmaes* of *Sphynx*; and the *Fables* of *Æſop*; and the like. So the *Apophthegmes* of the Ancient ſages, were likewiſe expreſſed by *ſimilitudes*. So *Menenius Agrippa*, amongſt

Liv. Hiſt. lib. 2.

amongſt the Romans, a Nation in that Age not learned, repreſſed a ſedition by a Fable. *And as Hieroglyphicks were before letters; ſo Parables were before Arguments.* So even at this day, and ever, there is and hath been much life, and vigour in *Parables*; becauſe Arguments cannot be ſo ſenſible, nor examples ſo fit. *There is another uſe of Parabolical Poeſy, oppoſite to the former, which tendeth to the folding up of thoſe things; the dignity whereof, deſerves to be retired, and diſtinguiſht, as with a drawn Curtain: That is, when the ſecrets and myſteries of Religion, Policy, and Philoſophy are veiled, and inveſted with Fables, and Parables.* But whether there be any miſtical ſence couched under the ancient *Fables* of the *Poets*, may admit ſome doubt: and indeed for our part we incline to this opinion, as to think, that there was an infuſed myſtery in many of the ancient *Fables* of the *Poets*. Neither doth it move us that theſe matters are left commonly to School-boys, and Grammarians, and ſo are embaſed, that we ſhould therefore make a ſlight judgement upon them: but contrarywiſe becauſe it is clear, that the *writings* which recite thoſe *Fables*, of all the writings of men, next to ſacred writ, are the moſt ancient; and that the *Fables* themſelves, are far more ancient than they (being they are alledged by thoſe writers, not as excogitated by them, but as credited and recepted before) they ſeem to be like a thin fine rarified Air, which from the traditions of more Ancient Nations, fell into the Flutes of the Grecians. And becauſe that whatſoever hath hitherto been undertaken for interpretation of theſe *Parables*, namely by unskilful men, not learned beyond common places, gives us no ſatisfaction at all; we thought good to refer Philoſopy according to *ancient Parables*, in the number of *Deficients*.

§ And we will annex an example or two of this work: not that the matter perhaps is of ſuch moment: but to maintain the purpoſe of our deſign. That is this; that if any portion of theſe works, which we report as *Deficient*, chance to be more obſcure than ordinary; that we always propoſe, either Precepts, or Examples, for the perfecting of that work; leſt perchance ſome ſhould imagine, that our conceit hath only comprehended ſome light notions of them; and that we like Augures, only meaſure Countries in our mind, but know not how to ſet one foot forward thither. As for any other part defective in *Poeſy*, we find none; nay rather, *Poeſy* being a plant coming, as it were, from the luſt of a rank ſoil, without any certain ſeed, it hath ſprung up, and ſpread abroad above all other kind of Learning. But now we will propound examples, in number only three, one from things *Natural*; one from *Political*; and one from *Moral*.

The firſt example of Philoſophy, according to Ancient Parables in things Natural. *Of the* Univerſe, *according to the Fable of* Pan.

IV. The Original of *Pan*, the Ancients leave doubtful; for ſome ſay that he was the *Son of Mercury*, others attribute unto him a far different beginning: For they affirm that all *Penelopes* ſuitors had to do with her, and from this promiſcuous Act *Pan* deſcended, a common offſpring to them all. There is a third conceit of his birth, not to be paſſed over: for ſome report that he was the ſon of *Jupiter* and *Hybris*, which ſignifies con-

Hom. Hym. Herod. Eut.

contumelie. But however begotten, the *Parcæ*, they ſay, were his ſiſters, who dwelt in a cave under ground; but *Pan* remained in the open Air. The figure and form, Antiquity repreſented him by, was this. He had on his head a pair of Horns, riſing in a ſharp, acuminate to heaven; his body ſhagged, and hairy; his beard very long; his ſhape biformed; above like a man, below like a beaſt; finiſht with the feet of a Goat. He bare theſe enſigns of Juriſdiction; in his left hand a pipe of ſeven Reeds; in his right a ſheep hook or a ſtaff, at the upper end crooked or inflexed: he was clad with a Mantle made of a Leopards skin. *The dignities* and offices attributed unto him were theſe; that he was the God of Hunters; of Shepherds; and of all Rural Inhabitants: Lo. Preſident Mountains; and next to *Mercury*, the Embaſſadour of the Gods. *Moreover* he was accounted the Leader, and Commander of the Nymphs; which were always wont to dance the Rounds, and frisk about him: his train were the Satyrs, and the old *Sileni*: He had power alſo to ſtrike men with terrors, and thoſe eſpecially vain, and ſuperſtitious, which are termed *Panick fears*. *His Acts* recorded are not many; the chiefeſt was, that he challenged *Cupid* at wreſtling, in which conflict he had the foil; caught *Typhon* in a net, and held him faſt. *Moreover* when *Ceres* being ſad and vext for the Rape of *Proſerpina*, had hid her ſelf, and that all the Gods took pains by diſperſing themſelves ſeveral ways, to find her out; it was only *Pans* good fortune, as he was hunting, to lite on her, and to give the firſt intelligence where ſhe was. *He preſumed* alſo to put it to the trial, who was the better muſician he or *Apollo*, and by the judgment of *Midas* was preferred; for which judgment, *Midas* had a pair of Aſſes ears ſecretly imped to his head. Of the Love-tricks of *Pan*, there is nothing reported, or at leaſt not much; a thing to be wondred at, eſpecially being among a Troop of Gods ſo profuſely amorous. This alſo is ſaid of him, That he loved the Nymph *Eccho*, whom he took to wife; and one pretty wench more called *Syrinx*, towards whom *Cupid* (in an angry revengeful humour becauſe ſo audaciouſly he had challenged him at wreſtling) inflamed his deſire. *So he* is reported once to have ſollicited the Moon apart into the high Woods. *Moreover* he had no iſſue (which is a marvel alſo, ſeeing the Gods, ſpecially thoſe of the male-kind, were very Generative) only he was the reputed Father of a little Girl called *Iambe*, that with many pretty tales was wont to make ſtrangers merry; and ſome thought that ſhe was begotten of his wife *Eccho*. The *Parable* ſeemeth to be this.

Cic. Epiſt. ad Act. l. 5.

Claud. de R. Proſer.

Ovid. Met. XI.

§ *Pan* as the very name imports repreſents, or layeth open the world, or the world of things. *Concerning* his Original there are only two opinions that go for Currant: For either he came of *Mercury*, that is the *Word of God*, which the holy Scriptures, without all Controverſie, affirm; and the Philoſophers, ſuch as were the more Divine, ſaw; or elſe *from the confuſed ſeeds of things*. For ſome of the Philoſophers held, that the Seeds and Principles of Nature, were even in the ſubſtance infinite, hence the opinion, of *Similary Parts primordial*, was brought in; which *Anaxagoras* either invented, or celebrated. Some more acutely and ſoberly, think it ſufficient to ſalve the variety of Nature, if ſeeds, the ſame in ſubſtance, be only diverſified in form and figure; certain and definite; and placed the reſt in the incloſure, and boſom

Laert. in Anaxag.

Laert in vitis eorum.

boſom of the ſeeds. From this ſpring, the opinion of Atomes is derived, which *Democritus* maintain'd; and *Lucippus* found out. But others, though they affirm only one Principle of Nature (*Thales* water; *Anaximenes* Air; *Heraclitus* Fire) yet they have deſined that Principle, which is one in Act, to be various and diſpenſable in power; as that wherein the ſeeds of all natural eſſences lie hidden. *They* who have introduced the firſt Matter every way diſarayed, and unformed, and indifferent to any form (as *Plato* and *Ariſtotle* did) came to a far nearer, and natural reſemblance of the *Figure* of the *Parable*. For they conceiv'd the Matter as a common Courtezan; and the Forms as Suitors. So as all the Opinions touching the beginnings of things come to this point, and may be reduc'd to this diſtribution; that the world took beginning either from *Mercury*; or from *Penelope*; and all her ſuitors. *The third* conceit of *Pans* Original is ſuch, as it ſeems that the Grecians either by intercourſe with the Ægyptians; or one way or other, had heard ſomething of the Hebrew myſteries. For it points to the ſtate of the World not conſidered in the abſolute production; but as it ſtood after the fall of *Adam*, expos'd and made ſubject to Death and Corruption: For in that ſtate it was, and remains to this day; the off-ſpring of God; and of Sin, or *Contumely:* For the *like* ſin of *Adam* was a kind of Contumely, when *he would be like God*. And therefore all theſe three Narrations concerning the manner of *Pans* Birth, may ſeem true; if they be rightly diſtinguiſht according to things and times. For this *Pan*, as we now behold and comprehend it, took beginning from the word of God, by the means of confuſed matter, which yet was the work of God, and the entrance of Prevarication, and through it of corruption.

Laert. in vitis.

In Timæo Phyſ. I.

Gen. 3.

§ The *Deſtinies* may well be thought the ſiſters of *Pan*, or *Nature:* for the beginnings, and continuances, and diſſolutions; the Depreſſions alſo, and eminencies, and labours, and felicities of things; and whatſoever conditions of a particular Nature, are called *Fates* or *Deſtinies:* which yet, unleſs it be in ſome noble individuate ſubject, as a Man, a City, or a Nation, commonly are not acknowledged. But *Pan*, that is, the *Nature of things*, is the cauſe of theſe ſeveral ſtates, and qualities in every particular; ſo as in reſpect of Individuals, the *Chain* of nature, and the thread of the *Deſtinies*, is the ſame. Moreover the Ancients feigned, that *Pan* ever lived in the open Air; but the *Parcæ*, or *Deſtinies*, in a mighty ſubterraneous Cave; from whence with an infinite ſwiftneſs they flew to men: becauſe the nature and common face of the *Univerſe* is apert, and viſible; but the individual *Fates* of Particulars are ſecret, ſwift, and ſuddain. But if *Fate* be taken in a more general acception, as to ſignifie the more notable only, and not every common event; yet in that ſenſe alſo, the ſignification is correſpondent to the univerſal ſtate of things; ſeeing from the order of *Nature*, there is nothing ſo ſmall which comes to paſs without a Cauſe; and nothing ſo abſolutely great, as to be independent; ſo that the very Fabrick of *Nature* comprehendeth in the lap and boſom thereof, every event, ſmall or great; and by a conſtant rule diſcloſeth them in due ſeaſon. Wherefore no marvel if the *Parcæ* be brought in, as the legitimate Siſters of *Pan:* For *Fortune* is the daughter of the fooliſh vulgar; and found favour only with the more unſound Philoſophers. Certain-

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ly the words of Epicurus ſavour leſs of Dotage than of prophaneneſs where he ſaith; *Præſtare, credere fabulam Deorum, quam Fatum aſſerere*, As if any thing in the frame of nature could be like an Iſland, which is ſeparate from the connection of the continent. But *Epicurus* (as it is evident from his own words) accommodating, and ſubjecting his *Natural Philoſophy* to his *Moral*; would hear of no opinion which might preſs and ſting the conſcience; or any way diſcalm, and trouble that *Euthymia*, or *Tranquillity of mind*, which he had receiv'd from *Democritus*. Wherefore being more indulgent to the deluſions of his own fancyes, than patient of truth; he hath fairly caſt off the yoak, and abandon'd as well the *Neceſſity* of *Fate*, as the *Fear* of the *Gods*. And thus much concerning the Fraternity of *Pan* with the *Deſtinies*.

Senec. in Epiſt.

§ *Horns* are attributed unto the *World*, broad at the root, ſharp at the top; the nature of all things being like a Pyramis leſſening upwards. For *Individuals* in which the Baſe of nature is ſpread out; being infinite, are collected into Species, which are many alſo; Species again riſe up into Generals; and theſe aſcending are contracted into more Univerſal Generalities; ſo that at length, nature may ſeem to cloſe in a *unity*; which is ſignified by the Pyramidal Figure of *Pans Horns*. Neither is it to be wondr'd at, that *Pan* toucheth heaven with his *horns*; ſeeing the tranſcendentals *of Nature*, or *Univerſal Ideas*, do in ſome ſort reach things Divine. Wherefore Homers *famous Chain of Natural Cauſes, tyed to the foot of* Iupiters *Chair*, was celebrated. And it is plain, that no man converſant in *Metaphyſick*; and thoſe things which in Nature are *Eternal*, and immoveable; and that hath never ſo little withdrawn his mind from the fluid ruin of ſublunary things, which doth not at the ſame inſtant fall upon *Natural Theology*: ſo direct and compendious a paſſage it is, from the top of the *Pyramis*, to matters Divine.

Iliad. IX.

§ The body of *Nature* is elegantly and and lively drawn *Hairy*, repreſenting the beams of things; for beams are, as it were, the hairs or briſtles of nature; and every Creature is more or leſs Beamy; which is moſt apparent in the faculty of ſeeing; and no leſs in every magnetick virtue, and operation upon diſtance; for whatſoever worketh upon any thing upon Diſtance, that may rightly be ſaid to dart forth rays. Moreover *Pans beard* is ſaid to be exceeding long, becauſe the beams or influences of the Heavens; and ſpecially of the Sun, do operate, and pierce fartheſt of all; ſo that not only the ſurface, but the inward bowels of the earth have been turn'd; ſubduc'd; and impregnate, with the maſculine Spirit of the heavenly influence. And the form of *Pans beard* is the more elegant; becauſe the *Sun*, when his higher part, is ſhadowed with a Cloud, his beams break out in the lower; and ſo appears to the eye as if he were *bearded*.

§ Nature is alſo moſt expreſſively ſet forth with a *bi-formed Body*; in reference to the Differences between ſuperiour and inferiour bodies. For the one part, by reaſon of their beauty; and equability; and conſtancy of motion; and dominion over the earth; and earthly things; is aptly ſet out by the ſhape of man: And the other part in reſpect of their perturbations; and irregular motions; and that they are for moſt part commanded by the Celeſtial; may be well fitted with the figure of a *bruit beaſt*. Again this ſame *bi-formed* deſcription of his *body*, pertains

tains to the participation of the ſpecies or kind; for no ſpecies of Nature, ſeems to be ſimple; but, as it were participating and compounded of two, Eſſential Ingredients. For Man hath ſomething of a Beaſt: a Beaſt ſomething of a Plant: a Plant ſomething of an inanimate Body: and all natural things are indeed bi-formed; and compounded of a ſuperiour and inferiour kind.

§ It is a witty Allegory that fame, of the *feet of the Goat*; by reaſon of the upward tending motions of Terreſtrial bodies towards the regions of the air; and of the heaven; where alſo they become penſile; and from thence are rather forc'd down, than fall down. For the Goat is a mounting Animal, that loves to be hanging upon rocks, and precipices, and ſteep hills: And this is done alſo in a wonderful manner, even by thoſe things which are deſtinated to this inferiour Globe; as may manifeſtly appear, in *Clouds* and *Meteors*. And it was not without the grounds of reaſon, that *Gilbert*, who hath written a painful and an experimental work, touching a *Loadſtone*, caſt in this doubt, *Whether or no ponderous bodies, after a great diſtance, and long diſcontinuance from the earth, may not put off their motion towards the inferiour Globe.*? De Magn.

§ The two enſigns which *Pan* bears in his hands, do point, the one at *Harmony*, the other at *Empiry*: for the *Pipe of ſeven Reeds*, doth evidently demonſtrate the conſent and *Harmony*; or diſcordant concord of Nature, which is cauſed by the motion of the ſeven wandring ſtars: for there are no other Errors, or manifeſt Expatiations in heaven, ſave thoſe of the ſeven Planets; which being intermingled, and moderated with the equality of the fixed ſtarrs; and their perpetual and invariable diſtance one from the other, may maintain and excite both the conſtancy in ſpecifical; and the fluency of Individual Natures. If there be any leſſer Planets which are not conſpicuous; or any greater Mutation in heaven (as in many ſuperlunary Comets) they ſeem but like Pipes, either altogether mute, or only ſtreperous for a time, becauſe their influence either doth not ſtream down ſo low as to us; or doth not long interrupt the Harmony of the *ſeven Pipes of Pan*. And that *Staff of Empiry*, may be excellently applied to the order of Nature, which is partly right, partly crooked. And this ſtaff or rod is eſpecially crooked at the upper end; becauſe all the works of Divine Providence are commonly fetcht about by circuits, and windings; ſo that one thing may ſeem to be done, and yet indeed a clean contrary brought to paſs; as *the ſelling of Joſeph into Egypt*, and the like. Beſides in all wiſe humane Government, they that ſit at the helm, do more happily bring their purpoſes about, and inſinuate more eaſily things fit for the people, by pretexts, and oblique courſes; than by down-right dealing. Nay, (which perchance may ſeem very ſtrange) in things meerly natural, you may ſooner deceive nature, than force her; ſo improper, and ſelf-impeaching are open direct proceedings; whereas on the other ſide, an oblique and an inſinuating way, gently glides along, and compaſſeth the intended effect. Gen. 45.

§ *Pans Cloak or Mantle*, is ingeniouſly feigned to be the *Skin of a Leopard*, becauſe it is full of ſpots: ſo the Heavens are ſpotted with Stars; the Sea with Iſlands; the Land with Flowers; and every particular creature alſo, is for moſt part garniſhed with divers colours about the ſuperficies; which is, as it were, a Mantle unto it.

§ The office of *Pan* could be by nothing ſo conceived; and expreſt to the life, as by feigning him to be the *God of Hunters*; for every natural Action, and ſo by conſequence, motion and progreſſion, is nothing elſe but a *Hunting*. Arts and Sciences have their works; and humane Councils their ends, which they they earneſtly *hunt* after. All natural things have either their food, as a *prey*; or their pleaſure, as a recreation; which they ſeek for; and that in a quick-diſcurſive, and diſcerning way,

Virg. B. 2. *Torva leæna Lupum ſequitur, Lupus ipſe Capellam,*
Florentem Cythiſum ſequitur laſciva Capella.

§ *Pan* is alſo ſaid to be the God of the *Country Swains*; becauſe men of this condition lead lives more agreeable unto Nature, than thoſe that live in the Cities and Courts of Princes; where Nature by too much Art is corrupted: ſo as the ſaying of the Poet (though in the ſence of love) may be here verified:

Mart. Ep. ——*Pars minima eſt ipſa puella ſui.*

§ *Pan* was held to be *Lord Preſident of the Mountains*; becauſe in high Mountains and Hills *Nature* lays her ſelf moſt open, and is moſt diſplayed to the view and contemplation of men.

§ Whereas *Pan* is ſaid to be (*next unto Mercury*) the *Meſſenger* of the Gods; there is in that a Divine Myſtery contained; becauſe, next unto the word of God, the *Image* of the world proclaims the Divine power and wiſdom; as records the ſacred Poet, *The Heavens proclaim the* Pſal. 19. *Glory of God, and the vaſt Expanſion reports the works of his hands.*

§ The *Nymphs*, that is the Souls of living things, give great delight to *Pan:* for the ſouls of the living are the Minions of the World. The *Conduct* of theſe Nymphs is with great reaſon attributed to *Pan*, becauſe theſe Nymphs, or Souls of the living, do follow their natural diſpoſition, as their guides; and with infinite variety every one of them after the faſhion of his Country, doth leap and dance with unceſſant motion about her. *Wherefore one of the Modern* very ingeniouſly hath N. L. reduced all the power of the Soul into Motion; noting the miſpriſion, and precipitancy of ſome of the ancients; who fixing their eyes and thoughts with unadviſed haſte, upon Memory; Imagination and Reaſon have paſt over the *Cogitative faculty* untoucht; which hath a chief part in the order of conception. For he that calleth a thing into his mind, whether by impreſſion or recordation, *cogitateth* and *conſidereth*; and he that imployeth the faculty of his phanſie, alſo *cogitateth*; and he that reaſoneth doth in like manner *cogitate* or adviſe: and to be brief, the Soul of man, whether admoniſht by ſenſe, or left to her own liberty; whether in functions of the Intellect, or of the affections and of the will, dances to the muſical Airs of the *cogitations*; which is that *tripudiation* of the *Nymphs*.

§ The *Satyres*, and *Sileni*, are perpetual followers of *Pan*, that is old age and youth: for of all natural things, there is a lively, jocund, and (as I may ſay) a dancing age; and a dull, flegmatick age: the carriages and diſpoſitions of both which ages, may peradventure ſeem to a man

man which ſeriouſly obſerves them, as ridiculous and deformed, as thoſe of the *Satyrs*, or of the *Sileni*.

§ Touching the *Terrors which* Pan *is ſaid to be the Author of*, there may be made a wiſe inſtruction; namely, *that Nature hath implanted in every living thing, a kind of care and fear, tending to the preſervation of its own life, and being; and to the repelling and ſhunning of all hurtful encounters.* And yet Nature knows not how to keep a mean, but always intermixeth vain and empty fears, with ſuch as are diſcreet and profitable; ſo that all things (if their inſides might be ſeen) would appear full of *Panick frights*; but ſpecially Men; and above all other men, the people which are wonderfully travailed and toſſed with ſuperſtition; ſpecially in hard, and formidable, and adverſe times; which indeed is nothing elſe but a *Panick terror*. Nor doth this ſuperſtition reign only in the vulgar; but from popular opinons, breaks out ſome times upon wiſe men; as Divinely *Epicurus* (if the reſt of his diſcourſes touching the Gods, had been conformable to this rule) *Non Deos vulgi negare prophanum; ſed vulgi opiniones diis applicare prophanum.* Laert. in Epicur.

§ Concerning *the audacity of* Pan; *and his combate upon challenge with* Cupid; *the meaning of it is, that matter wants not inclination, and deſire, to the relapſing and diſſolution of the World into the old Chaos; if her malice and violence were not reſtrained and kept in order, by the prepotent concord of things; ſignified by* Cupid, *or the God of Love.* And therefore it fell out well for man, by the fatal contexture of the world; or rather the great goodneſs of the Divine Providence, that *Pan* was found too weak, and overcome. To the ſame effect may be interpreted, *his catching of* Typhon *in a net:* for howſoever there may ſometimes happen vaſt, and unwonted tumors (as the name of *Typhon* imports) either in the Sea, or in the Air, or in the Earth; yet nature doth intangle in an intricate toil, and curb, and reſtrain, as it were with a chain of Adamant, the exceſſes and inſolencies of theſe kind of Bodies.

§ As touching the *finding out of* Ceres, *attributed to this God, and that as he was hunting and thought little of it*, which none of the other Gods could do, though they did nothing elſe but ſeek her, and that with diligence; it gives us this true and grave admonition; that is, *that men do not expect the invention of things neceſſary for life and manners, from abſtract Philoſophies, as from the greater Gods; though they ſhould apply themſelves to no other ſtudy; but only from* Pan, *that is, from diſcreet experience, and from the univerſal obſervation of the things of the World*; where oftentimes by chance (and as it were going a hunting) ſuch inventions are lited upon. For the moſt profitable inventions, are the off-ſpring of experience; and, as it were, certain Donatives diſtributed to men by chance.

§ His conteſtation with *Apollo* about *Muſick*; and the event thereof, contains a wholeſome inſtruction, which may ſerve to reſtrain mens reaſons, and judgements, with the reins of ſobriety, from boaſting and and glorying in their gifts. For there ſeems to be a two fold *Harmony* or *Muſick*; the one of Divine Wiſdom; the other of Humane Reaſon; for, to humane judgement, and as it were, the ear of mortals; the adminiſtration of the world; and of Creatures therein; and the Addas & incompar. Sandiſii comment. ad Ovid. Met. XI.

more ſecret judgements of God, ſound ſomewhat hard and harſh: Which rude ignorance, albeit it be well proclaim'd by Aſſes ears; yet notwithſtanding theſe ears are ſecret, and do not openly appear; neither is it perceived, or noted as a Deformity by the Vulgar.

§ Laſtly, it is not to be wondered at, that there is nothing attributed unto *Pan* concerning *Loves*, but only of the marriage with *Eccho*; for the world doth injoy it ſelf, and in it ſelf all things elſe. Now he that loves would enjoy ſomething: but where there is enough, there is no place left to deſire. Wherefore there can be no wanton love in *Pan*, or the *World*, nor deſire to obtain any thing, (ſeeing it is contented with it ſelf) but only *Speeches*; which (if plain) are pronounced by the Nymph *Eccho*, a thing not ſubſtantial, but only vocal; if more accurate by *Syringa*; that is, when *words* and *voices* are regulated by certain numbers; Poetical, or Oratorical, as by muſical meaſures. It is an excellent invention, that amongſt *ſpeeches* and *voices*, only *Eccho* ſhould be taken in marriage by the *World*; *for that alone is true Philoſophy, which doth faithfully render the very words of the world; and which is written, no otherwiſe, than the world doth dictate; and is nothing elſe than the image and reflection thereof*; and addeth nothing of its own, but only iterates, and reſounds.

§ And whereas *Pan is reported to have called the Moon aſide into a high-ſhadowed wood*; ſeems to appertain to the convention between ſence and heavenly, or divine things: For the caſe of *Endymion*, and *Pan* are different; the *Moon* of her own accord came down to *Endymion*, as he was aſleep: *For that Divine illuminations oftentimes gently ſlide into the underſtanding, caſt aſleep, and retired from the ſenſes*; but if they be called, and ſent for by *Senſe*, as by *Pan*; then they preſent no other light than that,

Quale ſub incertam lunam ſub luce malignâ
Eſt iter in ſylvis.——

It belongs alſo to the ſufficiency, and perfection of the world, that it begets no iſſue: For the world doth generate in reſpect of its parts; but in reſpect of the whole, how can it generate, ſeeing there is no body beyond the bounds of the Univerſe? *As for that Girl Iambe*, father'd upon *Pan*, certainly it is a wiſe adjection to the fable; for by *her* are repreſented thoſe *vain and idle Paradoxes concerning the nature of things*, which have been frequent in all ages, and have filled the world with novelties, for the matter, fruitleſs; ſpurious for the Race; by their garrulity, ſometimes pleaſant; ſometimes tedious and unſeaſonable.

An other example of Philoſophy according to Ancient Parables in Politicks *of War*, according to the Fable of *Perſeus*.

Herod. Polym. Ovid. Met. 4.

V. Perſeus *a Prince of the Eaſt is reported to have been imployed by* Pallas *for the deſtroying of* Meduſa, who was very infeſtious to the Weſtern parts of the World, about the utmoſt Coaſts of *Hiberia*. A

Monſter

Monſter huge and fierce, of an aſpect ſo dire and horrid, that with her very looks ſhe turn'd men into ſtones. Of all the *Gorgons* this *Meduſa* alone was mortal, the reſt not ſubject to death: *Perſeus* therefore preparing himſelf for this noble enterpriſe, had Arms and gifts beſtowed on him by three of the Gods: *Mercury* gave him wings fitted for his feet not his arms; *Pluto* a helmet; *Pallas* a ſhield, and a Looking-glaſs. *Notwithſtanding* although he was thus well furniſht, he went not directly to *Meduſa*, but turned into the *Greæ*, which by the Mothers ſide were ſiſters to the *Gorgons*. Theſe *Greæ* from their birth were hoary-headed, reſembling old women. They had but one only *eye*, and one *tooth* among them all; both which as they had occaſion to go abroad, they were wont in courſe to take with them, and at their return to lay them down again. This *eye* and *tooth* they lent to *Perſeus*; ſo finding himſelf completely appointed for the Action deſigned, with winged ſpeed he marches towards *Meduſa*. *Her he* found ſleeping; yet durſt not venture himſelf a front to her aſpect, if ſhe ſhould chance to awake; but turning his head aſide, beholding her by reflection in *Pallas* her *Mirror*, and ſo directing his blow, cut off her head; from whoſe bloud guſhing out, inſtantly there emerged *Pegaſus* the flying Horſe. *Her* head thus ſmitten off, *Perſeus* transfers and inſerts into *Pallas* her ſhield; which yet retained this virtue, that whoſoever lookt upon it, as one blaſted or Plannet-ſtruck, he ſhould ſuddenly become ſenſeleſs. Paus. Strab.

§ *This Fable* ſeems to be deviſed for direction to the preparation, and order that is to be obſerved in making of war. And firſt the undertaking of any war ought to be as a commiſſion from *Pallas*; certainly not from *Venus*, (as the Trojan war was) or ſome ſuch ſlight motive; becauſe the Deſigns of War, ought to be grounded upon ſolid counſels. Then for the choice of War; for the nature and quality thereof; the Fable propounds three grave and wholſome Precepts. *The firſt is, that a Prince do not much trouble himſelf about the conqueſt of neighbour Nations: nor is the way of enlarging a Patrimony, and an Empiry, the ſame; for in the augmentation of private poſſeſſions, the vicinity of Territories is to be conſidered; but in the amplification of publick Dominions, the occaſion and facility of making war, and the fruit to be expected, ought to be inſtead of propinquity.* Therefore *Perſeus*, though an Eaſtern Prince, makes the expedition of his War a far off, even in the remoteſt parts of the Weſtern World. *There is a notable* preſident of this Caſe, in the different manner of warring, practiſed by two Kings, the Father and the Son, *Philip* and *Alexander*. For *Philip* warred upon Borderers only, and added to the Empire ſome few Cities, and that not without great contention and danger; who many times, but eſpecially in a *Theban* war, was brought into extreme hazard: But *Alexander* carried the Actions of his War a far off; and with a proſperous boldneſs undertook an expedition againſt the *Perſian*; conquered infinite Nations; tired, rather with travel than war. This point is farther cleared in the propagation of the *Roman Empire*, what time their conqueſts towards the *Weſt* ſcarce reacht beyond *Liguria*, did yet in the *Eaſt*, bring all the Provinces, as far as the mountain *Taurus*, within the compaſs of their Arms and command. So *Charles* the Eighth, King of *France*, finding the War of Britain (which afterward was compounded by marrige) not Sandys Comment. in Ovid. Met. 4. Renovard. Plut. in Alex. Id. de Fort. Alex. Hiſt. Franc. Serres. lii.

not ſo feaſible, purſued his enterprize upon *Naples*, which he accompliſht with wonderful facility and felicity. Certainly wars made upon Nations far off, have this advantage, that they are to fight with thoſe who are not practiſed in the diſcipline and Arms of the Aggreſſor: but in a war made upon Borderers, the caſe is otherwiſe. Beſides the preparation for ſuch an expedition is commonly better appointed; and the terror to the enemy from ſuch a bold and confident enterprize, the greater. Neither can there uſually be made, by the enemy to whom the war is brought ſo far off, any retaliation or reciprocal invaſion; which in a war upon borderers often falls out. But the chief point is, that in ſubduing a neighbour ſtate, the election of advantages is brought to a ſtreight; but in a foreign expedition, a man may turn the race of the war at pleaſure, thither, where military diſcipline is moſt weakned; or the ſtrength of the Nation much waſted and worn; or Civil diſcords are ſeaſonably on foot; or ſuch like opportunities preſent themſelves.

Cic. 1. de Off. Bacon de jure Belli cont. Hiſp.

§ *The ſecond precept is, that the motives of war be juſt; and Religious; and Honourable; and Plauſible:* for that begets alacrity, as well in the Souldiers that fight, as in the people that afford pay: it draws on and procureth aids; and hath many other advantages beſides. Amongſt the juſt grounds of war, that is moſt favourable, which is undertaken for the extirpation of Tyrants; under whom the people looſe their courage, and are caſt down without heart and vigour, *as in the ſight of Meduſa:* which kind of heroick Acts, procured *Hercules* a divinity amongſt the Gods. Certainly it was a point of Religion amongſt the Romans, with valour and ſpeed, to aid and ſuccour their confederates and allies, that were any way diſtreſſed. So juſt vindictive wars have for moſt part been proſperous; ſo the war againſt *Brutus* and *Caſſius*, for the revenge of *Cæſars* death; of *Severus* for the death of *Pertinax*; of *Junius Brutus* for the revenge of the death of *Lucretia:* and in a word, whoſoever relieve and revenge the calamities and injuries of men, bear arms under *Perſeus.*

Ovid. Met. IX. Sandiſii. Comment.

Tacit. Herodian. &c.

Fra. Bacon ut ſupra.

§ *The third precept is, that in the undertaking of any war, a true eſtimate of the forces* be taken; and that it be rightly weighed whether the enterpriſe may be compaſt and accompliſht; leſt vaſt and endleſs deſigns be purſued. *For amongſt the Gorgons*, by which war is repreſented, *Perſeus* wiſely undertook her only, that was mortal; and did not ſet his mind upon impoſſibilities. Thus far the fable inſtructs touching thoſe things that fall in deliberation, about the undertaking of a war; the reſt pertain to the war it ſelf.

§ *In war thoſe three gifts of the Gods do moſt avail*, ſo as commonly they govern, and lead fortune after them: for *Perſeus received ſpeed, from Mercury*; concealing *of his Counſels, from* Orcus; *and* Providence *from* Pallas. Neither is it without an Allegory, and that moſt prudent, that thoſe wings of *ſpeed* in diſpatch of affairs (for quickneſs in war is of ſpecial importance) were faſtened unto his heels, and not unto his Armholes; to his feet, and not to his ſhoulders; becauſe *celerity* is required, not ſo much in the firſt aggreſſions and preparations; as in the purſuit and the ſuccours that ſecond the firſt aſſaults: for there is no errors in war more frequent, *than that proſecution, and ſubſidiary forces, fail to anſwer the alacrity of the firſt onſets. Now the Helmet of Pluto*, which hath power to make men inviſible, is plain in the Moral: for the *ſecreting*

ting of Counſels next to *Celerity*, is of great moment in War; whereof Celerity it ſelf is a great part; for *ſpeed*, prevents the diſcloſure of Counſels. *It pertains to* Pluto's *Helmet*, that there be one General of the Army in War, inveſted with abſolute authority; for conſultations communicated with many, partake more of the *Plumes* of *Mars*, than of the *Helmet* of *Pluto*. To the ſame purpoſe are various pretenſions, and doubtful deſignations, and emiſſary reports; which either caſt a cloud over mens eyes, or turn them another way, and place the true aims of Counſels in the dark: for diligent and diffident cautions touching Letters, Ambaſſadors, Rebels, and many ſuch like Proviſoes, adorn and begirt the *Helmet* of *Pluto*. *But it importeth no leſs*, to diſcover the Counſels of the enemy, than to conceal their own: wherefore to the *Helmet* of *Pluto*, we muſt joyn the *Looking-glaſs* of *Pallas*, whereby the ſtrength, the weakneſs, the ſecret abettors, the diviſions and factions, the proceedings and counſels of the enemy may be diſcerned and diſcloſed. *And becauſe the caſualties of war are ſuch*, as we muſt not put too much confidence, either in the concealing our own deſigns, or the diſſecreting the deſigns of the enemy, or in celerity it ſelf; we muſt eſpecially take the *Shield* of *Pallas*, that is of *Providence*; that ſo, as little, as may be, be left to Fortune. Hitherto belong the ſending out of Eſpials, the fortification of Camps, (which in the Military Diſcipline of this latter age, is almoſt grown out of uſe: for the Camps of the Romans were ſtrengthened as if it had been a City, againſt all adverſe events of War) a ſetled and well ordered Army, not truſting too much to the light Bands, or to the Troops of Horſemen, and whatſoever appertains to a ſubſtantial and adviſed defenſive War: ſeeing in Wars the *Shield* of *Pallas* prevails more than the *ſword of* Mars,

§ *But Perſeus* albeit he was ſufficiently furniſht with forces and courage, yet was he to do one thing of ſpecial importance, before he enterprized the Action; and that was, to have ſome *intelligence with the Greæ*. Theſe *Greæ are treaſons*, which may be termed the *ſiſters of War*; not deſcended of the ſame ſtock, but far unlike in nobility of Birth: *ſo Wars are Generous and Heroical; but Treaſons baſe and ignoble*. Their deſcription is elegant, for they are ſaid to be gray-headed, and like old women from their birth; by reaſon that Traitors are continually vext with cares and trepidations. But all their ſtrength, before they break out into open Rebellions, conſiſts either in an *eye*, *or in a tooth*, for every faction alienated from any ſtate, hath an *evil eye*, *and bites*. Beſides, this *eye and tooth* is, as it were, common; for whatſoever they can learn or know, runs from hand to hand amongſt them. And as concerning the *tooth*, they do all bite alike, and caſt the ſame ſcandals; ſo that hear one, and you hear all. *Perſeus* therefore was to deal with theſe *Greæ*, and to engage their aſſiſtance for the loan of their *Eye and Tooth*: their *Eye for Diſcoveries*; their *Tooth for the ſowing and ſpreading of Rumors*; and the ſtirring up of envy; and the troubling of the minds of men. *After all things are well, and preparedly diſpoſed for war*; that is firſt of all to be taken into conſideration, which *Perſeus* did, *that* Meduſa *may be found aſleep*: for a wiſe Captain ever aſſaults the enemy unprepared; and when he is moſt ſecure. *Laſtly, in the very action and heat of war*, the looking into *Pallas* her *Glaſs*, is to be put in practice: for moſt men, before it come to the puſh, can with diligence

and

and circumſpection dive into, and diſcern the ſtate and deſigns of the enemies; but in the very point of danger, either are amazed with fear; or in a raſh mood fronting dangers too directly, precipitate themſelves into them; mindful of victory; but forgetful of evaſion, and retreat. Yet neither of theſe ſhould be practiſed, but they ſhould look with a reverſed countenance into *Pallas Mirror*; that ſo the ſtroak may be rightly directed, without either terror or fury,

§ After the war was finiſht, and the victory won, there followed two Effects; *The procreation and raiſing of Pegaſus*; which evidently denotes Fame, that flying through the world proclaims victory; and makes the remains of that war eaſy and feaſible. *The ſecond is the bearring of Meduſa's head in his ſhield*; becauſe there is no kind of defence for excellency comparable to this: For one famous and memorable Act proſperouſly enterpriz'd and atchieved; ſtrikes the Spirit of inſurrection in an enemy, into an amazing terror; and blaſts envy her ſelf into an aſtoniſhment and wonder.

The third Example of Philoſophy according to Ancient Parables in *Morality*. *Of Paſſion according to the Fable of Dionyſius.*

Orph. in Hym. Ov. Met. 3. Eurip. in Bacc. Nonn. in Dion.

VI *They ſay that Semele Jupiters Minion*, having bound her Paramour, by an inviolable oath, to grant her one requeſt which ſhe would ask, deſir'd that he would accompany her in the ſame form, wherein he came in to *Juno*: So ſhe periſht with lightning. Bnt the *Infant* which ſhe bare in her Womb, *Jupiter* the Father took out, and ſowed it in his thigh till the months were accompliſht, that it ſhould be born. *This burden* made *Jupiter* ſomewhat to limp; wherefore the child, becauſe it vext and pinched *Jupiter*, while it was in his flank, was called *Dionyſius*. *Being born* he was committed to *Proſerpina* for ſome years to be nurſt; and being grown up, he had ſuch a maiden face, as that a man could hardly judge whether it were a boy, or a girl. *He was dead alſo*, and buried for a time, but afterwards revived. *Being but a youth* he invented the planting and dreſſing of vines; the making and uſe of wine; for which becoming famous and renowned, he ſubjugated the world even to the utmoſt bounds of *India*. *He rode in a Chariot drawn with Tygers*. There danced about him certain deformed *Hobgoblins* called *Cobali*; *Acratus* and others; yea, even the *Muſes* alſo were ſome of his followers. *He took to wife Ariadne*, forſaken and left by *Theſeus*. The *tree ſacred unto him was the Ivy*. He was held the *Inventor* and *Inſtitutor* of *ſacrifices* and *Ceremonies*, but ſuch as were frantick and full of corruptions and cruelties. *He had likewiſe power to ſtrike men with madneſs*: For it is reported that at the Celebration of his *Orgyes*, two famous Worthies, *Pentheus* and *Orpheus*, were torn in pieces by certain mad-enraged women; the one becauſe he got upon a tree, out of a curioſity to behold their Ceremonies in theſe Sacrifices; the other becauſe he played ſweetly and cunningly upon the harp. *And for the Geſts* of this God, they are in a manner the ſame with *Iupiters*.

Pans: in Bœot. Eurip. in Bac.

V. Comment. in Ovid. Met 3. G. Sandis. Renovard.

§ *There is ſuch excellent Morality couch't in this fable*, as Moral Philoſophy affords not better. *For under the Perſon of Bacchus is deſcribed the nature of Paſſion; or of Affections and Perturbations of the mind. Firſt there-*

therefore touching the birth and parentage of *Paſſion*; the beginning of all Paſſion, though never ſo hurtful, is nothing elſe than *good Apparent*: For as the Mother of virtue is *good Exiſtent*; ſo the Mother of Paſſion is *good Apparent*. The one of theſe (under which Perſon, the ſoul of man is repreſented) is *Jupiters* lawful wife; the other his Concubine: which yet affecteth the honour of *Juno*, as *Semele* did. *Paſſion* is conceiv'd in an unlawful deſire, raſhly granted, before rightly underſtood, and judged: And after when it begins to grow fervent, the *Mother* of it, which is the Nature and Species of *Good*, by too much inflammation is deſtroyed and periſheth. The proceeding of *Paſſion* from the firſt conception thereof is after this manner: It is nouriſht and concealed by the mind of man, (which is the Parent of *Paſſion*,) ſpecially in the inferiour part of the mind, as in the thigh; and ſo vexeth, and pulleth, and depreſſeth the mind; as thoſe good determinations and actions, are much hindred and lamed thereby: but when it comes to be confirmed by conſent and habit; and breaks out into Act, that it hath now, as it were, fulfill'd the months, and is brought forth and born; firſt, for a while it is brought up by *Proſerpina*; that is, it ſeeks corners and ſecret places, and lurks, as it were, under ground; until the reigns of ſhame and fear laid aſide, and boldneſs coming on; it either aſſumes the pretext of ſome virtue, or becomes altogether impudent and ſhameleſs. *And it is moſt true that every vehement Paſſion is of a doubtful ſex*; being maſculine in the firſt motion; but feminine in proſecution. *It is an excellent fiction, that of dead* Bacchus, *reviving*; for *Paſſions* do ſometimes ſeem to be in a dead ſleep, and extinct; but we muſt not truſt them, no though they were buried: For let there be but matter and opportunity offer'd, they riſe again.

§ *The invention of the Vine is a wiſe Parable*; for every affection is very quick and witty in finding out that which nouriſheth and cheriſheth it; and of all things known to men, *wine is moſt powerful and efficacious to excite and inflame paſſions*; *of what kind ſoever*; as being, in a ſort, a common incentive to them all.

§ *Again, affection or paſſion is elegantly ſet down to be a ſubduer of Nations, and an undertaker of infinite expedition:* For *deſire* never reſts content with what it poſſeſſeth; but with an infinite and unſatiable appetite ſtill covets more; and harkens after a new purchaſe.

§ *So Tigers* Stable *by affections*; *and draw their Chariot:* For ſince the time that *Affection* began to ride in a Coach; and to go no more a foot; and to captivate *Reaſon*; and to lead her away in triumph; it grows cruel; unmanageable and fierce, againſt whatſoever withſtands or oppoſeth it.

§ *And it is a pretty device, that thoſe ridiculous* Demons, *are brought in dancing about* Bacchus *his Chariot:* For every vehement affection doth cauſe in the eyes, face, and geſture, undecent and ſubſeeming, apiſh, and deformed motions; ſo that they who in any kind of Paſſion, (as inanger, arrogance, or love,) ſeem glorious and brave in their own eyes; do appear to others miſhapen and ridiculous.

§ *The Muſes are ſeen in the company of paſſion:* and there is almoſt no affection ſo depraved and vile, which is not ſoothed by ſome kind of *Learning:* And herein the indulgence and arrogancy of Wits doth ex-

ceedingly derogate from the Majesty of the Muses; that whereas they should be the Leaders and Ancient-bearers of life; they are become the foot-pages, and bnffoons to lusts and vanity.

§ *Again, where* Bacchus *is said to have engaged his affections on her that was abandoned and rejected by another:* it is an Allegory of special regard; for it is most certain, that *passion* ever seeks and sues for that which experience hath relinquisht; and they all know, who have paid dear for serving and obeying their *lusts*; that whether it be honour, or riches, or delight, or glory, or knowledge, or any thing else, which they seek after; they pursue things cast off, and by divers men in all ages, after experience had, utterly rejected and repudiate.

§ *Neither is it without a Mystery, that the Ivy was sacred to* Bacchus; the application holds two ways: *First*, in that the *Ivy* remains green in Winter; *Secondly*, in that it creeps along, imbraceth, and advanceth it self over so many divers bodies, as trees, walls, and edifices. *Touching the first*, every *passion* doth through renitence and prohibition, and as it were, by an *Antiperistasis*, (like the *Ivy* through the cold of Winter) grow fresh and lively. *Secondly*, every predominant affection in mans soul, like the *Ivy*, doth compass and confine all Humane Actions and Counsels; neither can you find any thing so immaculate and inconcern'd, which affections have not tainted and clinched, as it were, with their tendrels.

§ *Neither is it a wonder, that superstitious ceremonies were attributed unto* Bacchus, seeing every giddy-headed humour keeps, in a manner, Revel-rout in false Religions; so that the pollutions and distempers of Hereticks, exceed the Bacchanals of the Heathens; and whose superstitions have been no less barbarous, than vile and loathsome. *Nor is it a wonder, that madness is thought to be sent by* Bacchus, seeing every affection in the Excess thereof, is a kind of *short fury*; and if it grow vehement and become habitual; it commonly concludes in *Madness*.

§ *Concerning the rending and dismembring of* Pentheus *and* Orpheus, *in the celebration of the Orgies of* Bacchus; the Parable is plain. For every *prevalent affection* is outragious against two things; *whereof the one is curious enquiry into it*; *the other free and wholsome admonition.* Nor will it avail, though that *inquiry* was only to contemplate and to behold, as it were going up into a tree, without any malignity of mind; nor again, though that *admonition* was given with much art and sweetness; but howsoever, the *Orgies* of *Bacchus* cannot endure either *Pentheus* or *Orpheus*.

§ *Lastly, that confusion of the persons of* Jupiter *and* Bacchus, may be well transferred to a Parable; seeing noble and famous Acts, and remarkable and glorious merits, do sometimes proceed from virtue and well ordered reason, and magnanimity; and sometimes from a secret affection, and a hidden passion; howsoever both the one and the other, so affect the renown of Fame and Glory; that a man can hardly distinguish between the Acts of *Bacchus*; and the Gests of *Jupiter*.

But we stay too long in the *Theatre*; let us now pass on to the *Palace of the Mind*; the *entrance* whereof we are to approach with more veneration and attention.

THE

THE

Third Book

OF

FRANCIS L. VERULAM

VICOUNT S^t. *ALBAN*,

OF THE

Dignity and Advancement

OF

LEARNING.

To the KING.

CHAP. I.

I. *The Partition of Sciences*, into Theology and Philoſophy. II. *Partition of* Philoſophy *into three Knowledges.* Of God; of Nature; of Man. III. *The Conſtitution of* Philoſophia Prima, or Summary Philoſophy; *as the Commune Parent of all.*

ALL *Hiſtory* (Excellent King) treads upon the Earth, and performs the office of a Guide, rather than of a light; and *Poeſie* is, as it were, the dream of Knowledge; a ſweet pleaſing thing, full of variations; and would be thought to be ſomewhat inſpired with Divine Rapture; which Dreams likewiſe pretend: but now it is time for me to awake, and to raiſe my ſelf from the Earth, cutting the liquid Air of *Philoſophy* and *Sciences.*

I. *Knowledge is like waters; ſome waters deſcend from the Heavens, ſome ſpring from the Earth*, ſo the Primary *Partition* of Sciences, is to be derived from their fountains; ſome are ſeated above; ſome are here beneath. For all knowledge proceeds from a twofold information; *either from divine inſpiration, or from external Senſe*; As for that knowledge which infuſed by inſtruction; that is Cumulative, not Original; as it is in waters, which beſides the Head-ſprings, are encreaſed by the

reception of other Rivers that fall into them. *Wherefore we will divide Sciences, into Theology; and Philoſophy;* by *Theology* we underſtand *Inſpired or Sacred Divinity;* not Natural, of which we are to ſpeak anon. But this *Inſpired Theology*, we reſerve for the laſt place, that we may cloſe up this work with it; ſeeing it is the Port and Sabbath of all Humane Contemplations.

II. *The Object of Philoſophy is of three ſorts; God; Nature; Man;* ſo likewiſe there is a Triple *Beam* of things; *for Nature darts upon the underſtanding with a direct* Beam; *God becauſe of the inequality of the medium, which is the Creature, with a refract* Beam; *and man repreſented and exhibited to himſelf, with a beam reflext.* Wherefore Philoſophy may fitly be divided into three knowledges; the *knowledge of God*; the *knowledge of Nature*; and the *knowledge of Man.*

III. And becauſe the Partition of Sciences are not like ſeveral lines that meet in one angle; but rather like branches of trees that meet in one ſtemm, which ſtemm for ſome dimenſion and ſpace is entire and continued, before it break, and part it ſelf into arms and boughs,; therefore the nature of the ſubject requires, before we purſue the parts of the former diſtribution, to erect and conſtitute *one univerſal Science*, which may be the mother of the reſt; and that in the progreſs of Sciences, a Portion, as it were, of the common high-way may be kept, before we come where the ways part and divide themſelves. *This Science we ſtile Primitive Philoſophy or Sapience*, which by the Ancients was defin'd to be, *The Science of things divine and humane.* To this *Science* none of the reſt is oppoſed, being it is differenced from other Knowledges, rather in the limits of latitude; than in the things and ſubject; * that is, handling only the tops of things. Whether I ſhould report this as *Deficient*, I ſtand doubtful, yet I think I very well may. For I find a certain kind of Rhapſody, and confuſed maſſe of knowledge, namely of *Natural Theology*; of *Logick*: of particular parts of *Natural Philoſophy* (as of the Principles of Nature, and of the ſoul) compoſited and compiled: and by the height of terms, from men who love to admire themſelves advanced, and exalted, as it were, to the vertical point of Sciences. But we, without any ſuch ſtately loftineſs, would only have thus much, *That there might be deſign'd a certain Science, that ſhould be the receptacle of all ſuch Axioms, as fall not within the compaſs of any ſpecial part of Philoſophy; but are more common to them all, or moſt of them.*

§ That there are many of this kind, needs not to be doubted. For example, *Si inæqualibus æqualia addas; omnia erunt inæqualia*; is a rule in the Mathematicks: and the ſame holds in the Ethicks concerning *Attributive Juſtice*; for in *Juſtice Expletive*, the reaſon of equity requires, *That equal Portion be given to unequal Perſons; but in Attributive, unleſs unequal be diſtributed unto unequal, it is a great injuſtice. Quæ in eodem tertio conveniunt, & inter ſe conueniunt*; is likewiſe a rule taken from the Mathematicks; but ſo potent in *Logick* alſo, as all Syllogiſms are built upon it. *Natura ſe potiſſimum prodit in minimis*, is a rule in Natural Philoſophy ſo prevalent, that it hath produced *Democritus* his Atomes; yet hath *Ariſtotle* made good uſe of it in his *Politicks*, where he raiſeth his contemplations of a City or State, from the Principles of a Family. *Omnia mutantur nil interit*; is alſo a maxime in Natural Philoſophy thus expreſſed, that the *Quantum* of Nature is neither diminiſht

Euclid. El. lib. 1.

Euclid. El. Ariſt.

Ariſt. de Part. Animal. 1.

Polit. 1.

niſht nor augmented: The ſame is applied to Natural Theology thus varied; *That they are the works of the ſame Omnipotence, to make nothing ſomewhat; and to make ſomewhat nothing*; which the Scriptures likewiſe teſtifie: *I have found by experience that all the works of God do perſevere for ever: nothing can be put unto them, nor any thing taken from them.* Eccleſ. 3. *Interitus rei arcetur per reductionem ejus ad Principia*, is a rule in Natural Philoſophy; the ſame holds alſo in the Politicks (as *Machiavel* hath wiſely obſerved) becauſe the means which muſt ſpecially preſerve States from ruine, are commonly nothing elſe than reformation, and a reduction of them to their Ancient cuſtomes. Diſc. ſopra la. 1. Dec. di liu. lib. 3. *Putredo ſerpens magis contagioſa eſt quam matura*; is a ground in Natural Philoſophy; the ſame Avicenna Hippoc. Plid. is an excellent Maxime in Moral Philoſophy; becauſe profeſſedly wicked, and deſperately impious perſons, do not corrupt publick manners ſo much, as they do, who ſeem to have ſome ſoundneſs and goodneſs in them; and are diſeaſed but in part. *Quod conſervativum eſt formæ majoris, id activitate potentius*; is a ground in natural Philoſophy: for it makes for the conſervation of the fabrick of the univerſe; that the chain and contexture of nature, be not cut aſunder or broken; and that there be not *vacuum*, as they call it, or *empty diſcontinuity* in the world; and that heavy bodies ſhould be congregate and aſſembled to the maſſy pile of the earth, makes for the conſervation of the Region of groſs and compacted natures: wherefore the firſt and univerſal motion commands, and ſubdues, the latter and more particular. Ariſt. alt. cubi. *The ſame rule* holds in the *Politicks*, for thoſe things which conduce to the conſervation of the whole *Body Politick* in its entire nature and abſence, are more potent, than thoſe things are, which make only for the well-fare and exiſtence of particular members, in a State or Civil Government. *So the ſame rule* takes place in Theology; for amongſt Theological virtues, *Charity*, a virtue moſt communicative excells all the reſt. *Augetur vis agentis per anti-periſtaſin contrarii:* is a rule in Natural Philoſophy; the ſame works wonders in Civil ſtates, for all faction is vehemently moved, and incenſed at the riſing of a contrary faction. Ariſt. Meteor. 1. Problem. §. 11. *Tonus diſcors in concordem actutum deſinens, concentum commendat: To fall ſuddenly from a Diſcord upon a Concord commends the Air:* it is a rule in Muſick: the like effect it worketh in Morality, and the Affections. That *Trope of Muſick*, to fall or ſlide ſoftly, from the cloſe or cadence (as they call it) when it ſeemed even to touch it, is common with the Trope of Rhetorick, *of deceiving expectation.* The Quavering upon a ſtop in Muſick, gives the ſame delight to the ear; that the playing of light upon the water, or the ſparkling of a Diamond gives to the eye. V. Boetde Muſica. &c.

Splendet tremulo ſub lumine Pontus. Virg. Æn. 7.

Organa ſenſuum cum Organis reflectionum conveniunt: This hath place in *Perſpective Art*; for the eye is like to a Glaſs, or to waters: and in *Acouſtick Art*; for the Inſtrument of hearing is like to the ſtraits and winding within a Cave. Theſe few inſtances may ſuffice for examples. And indeed the Perſian Magick, ſo much celebrated, conſiſts chiefly in this; *to obſerve the reſpondency in the Architectures, and Fabricks of things Natural; and of things Civil.* Neither are all theſe whereof we have ſpoken, and others of like nature *meer Similitudes* only, as men of narrow Alhaz. Opt. 4. Vitello. Paſſim.

obſer-

obſervation perchance may conceive; but one & the very ſame footſteps, and ſeals of Nature, printed upon ſeveral ſubjects or matters. *This kind of Science*, hath not been hitherto ſeriouſly handled: You may peradventure find in the Writings coming from the pens of the profounder ſorts of wits, Axioms of this kind, thinly and ſparſedly inſerted, for the uſe and explication of the Argument which they have in hand; but a complete body *of ſuch Maximes, which have a Primitive and Summary force and efficacy in all Sciences, none yet have compoſed*; being notwithſtanding a matter of ſuch conſequence, as doth notably conduce to the unity of Nature; which we conceive to be the office and uſe of *Philoſophia Prima.*

§ There is alſo an other part of this, *Primitive Philoſophy*, which, if if you reſpect *terms*, is Ancient; but, if the *matter* which we deſign, is new, and of an other kind; and it is an Inquiry concerning the *Acceſſory Condition of Entities*, which we may call *Tranſcendents*; as *Multitude*, *Paucity*; *Similitude*; *Diverſity*; *Poſſible*, and *Impoſſible*; *Entity*; *Non-entity*; and the like. For being *Tranſcendents* do not properly fall within the compaſs of *Natural Philoſophy*; and that Dialectical diſſertation about them is rather accommodated to the Forms of Argumentation, than the Nature of things; it is very convenient that this Contemplation, wherein there is ſo much dignity and and profit, ſhould not be altogether deſerted; but find at leaſt ſome room in the *Partitions of Sciences*: but this we underſtand to be perform'd far after an other manner, than uſually it hath been handled. *For example*, no man who hath treated of *Paucity* or *Multitude*, hath endeavour'd to give a reaſon, *Why ſome things in Nature are and may be ſo numerous and large; others ſo few and little.* For certainly it cannot be, that there ſhould be in nature as great ſtore of Gold, as of Iron; as great plenty of Roſes, as of Graſs; as great variety of determin'd and ſpecifick Natures, as of imperfects, and non-ſpecificates. *So* none in handling *Similitude* and *Diverſity*, hath ſufficiently diſcovered the Cauſe, why betwixt divers ſpecies there ſhould, as it were perpetually, be interpoſed, *Participles of Nature*, which are of a doubtful kind and reference; *as Moſs* betwixt Putrefaction and a Plant: *Fiſhes* which adhere and move not, betwixt a Plant and a living Creature: *Rats* and *Mice*, and other vermine between living Creatures generated of Putrefaction, and of ſeed: *Bats* or Flitter-miſe between Birds and Beaſts; *Flying Fiſhes*, now commonly known, between Fowls and Fiſh: Sea-calfs between Fiſhes and four-footed Beaſts; and the like. Neither hath any made diligent inquiry of the Reaſon how it ſhould come to paſs, *being like delights to unite to like*, that Iron draws not Iron, as the Loadſtone doth; nor Gold allures and attracts unto it Gold, as it doth Quickſilver. Concerning theſe and the like adjuncts of things, there is, in the common Diſceptation about *Tranſcendents* a deep ſilence: *For men have purſued Niceties of Terms, and not ſubtilties of things.* Wherefore we would have this *Primitive Philoſophy* to contain a ſubſtantial and ſolid inquiry of theſe *Tranſcendents, or Adventitious Conditions of Entities*, according to the Laws of *Nature*, and not according to the Laws of *Words*. So much touching *Primitive Philoſophy*, or *Sapience*, which we have juſtly referr'd to the Catalogue of *Deficients.*

CHAP.

CHAP. II.

I. Of *Natural Theologie.* § *Of the Knowledge of Angels, and of Spirits; which are an Appendix thereof.*

THE *Commune Parent* of Sciences being first placed in its proper Throne like unto *Berecynthia*, which had so much heavenly Issue.

Omnes Cœlicolæ, omnes supera alta tenentes. Virg. Æn. 6. i

We may return to the former Division of the three Philosopies, *Divine, Natural and Humane.*

I. *For Natural Theology*, is truly called *Divine Philosophy.* And this is defined to be a Knowledge, or rather a spark and rudiment of that Knowledge concerning God; such as may be had by the light of Nature; and the Contemplation of the Creature: which Knowledge may be truly termed *Divine* in respect of the Object; and *Natural* in respect of the Light. The Bounds of this Knowledge are truly set forth, that they may extend to the Confutation and Conviction of Atheism; the Information of the Law of Nature; but may not be drawn out to the Confirmation of Religion. *Therefore there was never Miracle wrought by God to convert an Atheist, because the light of Nature might have led him to confess a God; but Miracles are designed to convert Idolaters, and the Superstitious, who have acknowledged a Deity, but erred in his Adoration; because no light of Nature extends to declare the Will and true Worship of God.* For as works do shew forth the power and skill of the workman, but not his Image: So the works of God, do shew the Omnipotency and Wisdom of the Maker; but no way express his Image. And in this the Heathen opinion differs from the sacred Truth; For they defined the World to be the Image of God; Man the Image of the World; but Sacred Scriptures never vouchsafed the World that honour, as any where to be stiled the Image of God, but only, *the works of his hands:* but they substitute man, *the immedate Image of God.* Wherefore, that there is a God; that he reigns and rules the World; that he is most potent, wise, and provident: that he is a Rewarder, a Revenger; that he is to be adored; may be demonstrated and evinced even from his works; and many wonderful secrets touching his Atributes, and much more touching his Regiment and dispensation over the world, may likewise with sobriety be extracted, and manifested out of the same works; and is an Argument hath been profitably handled by divers. *But out of* the contemplation of Nature, and out of the Principles of Humane Reason, to discourse, or earnestly to urge a point touching the Mysteries of Faith; and again, to be curiously speculative into those secrets, to ventilate them; and to be inquisitive into the manner of the Mystery, is, in my judgement not safe: *Da Fidei quæ Fidei sunt.* For the Heathens themselves conclude as much, in that excellent and divine Fable of the golden Chain. *That Men and Gods* Psal. 8. Gen. 1.

were

Homer Iliad. 9. *were not able to draw* Jupiter *down to the Earth*; *but contrariwise* Jupiter *was able to draw them up to Heaven.* Wherefore he laboureth in vain, who shall attempt to draw down heavenly Mysteries to our reason; it rather becomes us to raise and advance our reason to the adored Throne of Divine Truth. *And in this part of Natural Theologie*, I am so far from noting any deficience, as I rather find an excess; which to observe I have somewhat digressed, because of the extreme prejudice, which both Religion and Philosophy have received thereby; as that which will fashion and forge a heretical Religion, and an imaginary and fabulous Philosophy.

§ *But as concerning the nature of Angels and Spirits*, the matter is otherwise to be conceived; which neither is inscrutable, nor interdicted; to which knowledge, from the affinity it hath with mans soul, there Coloss. 2. is a passage opened. The Scriptnre indeed commands, *let no man deceive you with sublime discourse touching the worship of Angels, pressing into that he knows not*; yet notwithstanding if you observe well that precept, you shall find there only two things forbidden; namely *Adoration of Angels*, such as is due to God; and *Phantastical Opinions of them*, either by extolling them above the degree of a creature; or to extol a mans knowledge of them farther than he hath warrantable ground. But the sober enquiry touching them, which by the gradations of things corporal, may ascend to the nature of them; or which may be seen in the Soul of Man, as in a Looking-glass, is in no wise restrained. *The same may be concluded of impure and revolted spirits*; the conversing with them, and the imployment of them, is prohibited; much more any veneration towards them; but the Contemplation or Science of their Nature; their Power; their Illusions; not only from places of sacred Scripture, but from reason or experience; is a principal part of Spiri- 2 Cor. 2. tual Wisdom. For so the Apostle saith, *we are not ignorant of his stratagems*. And it is no more unlawful to enquire, in natural Theology, the nature of *evil Spirits*; than to enquire the nature of Poysons in Physick, or of vices in the Ethicks. But this part of Science touching *Angels* and degenerate spirits, I cannot note as *Deficient*; for many have imployed their pens in it: Rather most of the Writers in this kind may be argued either of vanity, or superstition, or of unprofitable subtilty.

CHAP. III.

This Partition of Natural Philosophy into Speculative, and Operative. § *And that these two, both in the intention of the writer; and in the body of the Treatise, should be seperated.*

LEaving therefore *Natural Thologie* (to which we have attributed the enquiry of *Spirits*, as an Appendix) we may proceed to the second Part, namely that of *Nature, or Natural Philosophy. Democritus* Laert. Senec. saith excellently, *That the knowledge concerning Nature, lies hid in certain deep Mines and Caves.* And it is somewhat to the purpose, that the

the Alchimists do so much inculcate, *That* Vulcan *is a second Nature, and perfects that compendiously which Nature useth to effect by ambages and length of time:* why then may we not divide Philosophy into two parts; the *Mine, and the Fornace*; and make two professions, or occupations of *Natural Philosophers*; *Pyoners* or workers in the Mine; and *Smiths*, or Refiners? Certainly however we may seem to be conceited, and to speak in jest; yet we do best allow of a division in that kind, if it be proposed in more familiar and Scholastical terms; namely, that the *knowledge of Nature*, be divided into *the Inquisition of Causes*; and the *Production of Effects*; Speculative, and Operative; the one searcheth the bowels of Nature; the other fashions Nature, as it were, upon the Anvile. Paracel. de Philos. sagaci.

§ Now although I know very well with what a strict band, causes and effects are united; so as the explication of them, must in a sort be coupled and conjoyned: yet because all solid and fruitful Natural knowledge hath a double, and that distinct, scale or ladder; *Ascendent and Descendent*; From *Experiments to Axioms*, and from *Axioms to the new Experiments*. I judge it most requisite, that these two parts, *Speculative* and *Operative*, be separate, both in the intention of the Writer, and the Body of the Treatise.

Chap. IV.

I. *The Partition of the* Speculative knowledge *of Nature into* Physick special, and Metaphysick: *Whereof* Physick *enquires the Efficient Cause, and the Matter:* Metaphysick *the final Cause and the Form.* II. *The Partition of* Physick, into the knowledges of the Principles of Things; of the Fabrick of Things, or of the World: And of the variety of things. III. *The Partition of* Physick, *touching the variety of things*, into the Doctrine of Concretes; and into the Doctrine of Abstracts. *The Partition of the* knowledge of Concretes, *is referred over to the same Partition which Natural History Comprehends.* IV. *The Partition of the* knowledge of Abstracts, into the knowledge of the Schemes of Matter; and into the knowledge of Motions. V. *Two Appendices of* Speculative Physick; Natural Problems: *And the* Placits of Ancient Philosophers. VI. *The Partition of* Metaphysick, *into the* Doctrine of Forms; *And into the* Doctrine of the Final Causes.

I. That part of *Natural Philosophy* which is *Speculative and Theorical*, we think convenient to divide into *Physick special, and Metaphysick*. And in this Partition I desire it may be conceiv'd, that we use the *Metaphysick* in a different sence from that, that is received. And here it seems to fall out not unfitly, to advertise in general of our purpose and meaning touching the use of words, and terms of Art. *And it is this*, that as well in this word *Metaphysick* now delivered, as in other terms of Art, whersoever our conceptions and notions are new, and differ from the received; yet with much reverence, we retain the

Ancient terms: For being we hope, that the method it ſelf, and a perſpicuous explication of the Matter, which we labour to annex, may redeem us from an incongruous conception of the words we uſe, we are otherwiſe zealous (ſo far as we can without prejudice of Truth and Sciences) to depart as little as may be; from the opinions and expreſſions of Antiquity. And herein I cannot but marvail at the confidence of *Ariſtotle*, who poſſeſt with a ſpirit of contradiction; and denouncing war againſt all Antiquity, not only uſurpt a licenſe to coyn new terms of Arts at pleaſure; but hath endeavoured to deface and extinguiſh all ancient wiſdom. In ſo much as he never names any ancient Authors; or makes any mention of their opinions, but to reprehend their Perſons; or to redargue their Placits, and Opinions. Certainly if he affected glory, and drawing diſciples after him, he took the right courſe: For the fame comes to paſs in the aſſerting and receiving a Philoſophical Truth, that doth in a Divine Truth; *veni in nomine Patris, nec recipitis me, ſi quis venerit in nomine ſuo eum recipietis.* But from this divine Aphoriſm, if we conſider whom ſpecially it hath deſigned (namely Antichriſt the greateſt Impoſtor of all times) we may collect, *that the coming in a mans own name*, without any regard of *Antiquity*, or (if I may ſo ſpeak) of *Paternity*, is no good Augury of Truth, however it be joyned with the fortune and ſucceſs of an *eum recipietis.* *But for* Ariſtotle, *certainly an excellent man, and of an admirable profound wit, I ſhould eaſily be induced to believe; that he learned this ambition of his Scholar, whom perhaps he did emulate: that if one conquered all Nations; the other would conquer all Opinions, and raiſe to himſelf a kind of Monarchy in contemplations.* Although it may ſo fall out, that he may at ſome mens hands, that are of a bitter diſpoſition, and biting language, get a like title, as his Scholar did.

Ioan. 5.

Fœlix terrarum Prædo, non utile Mundo
Editus exemplum. ——— So.

Lucan. l. 10.

Fœlix Doctrinæ Prædo, &c. But to us on the other ſide that do deſire, ſo much as lies in the power of our pen, to contract a league and commerce between Ancient and Modern knowledge; our judgement ſtands firm, *to keep way with Antiquity, uſq; ad Aras*; and to retain the Ancient terms, though ſometimes we alter their Sence, and Definitions: according to the modern and approved manner of Innovation, in Civil Government; where the ſtate of things being changed, yet the ſolemnity of words and ſtiles is obſerved which *Tacitus* notes; *Eadem Magiſtratuum vocabula.*

Annal. 1.

§ To return therefore to the acception of the word *Metaphyſick*, in our ſence. It appears, by that which hath been already ſaid, that we diſtinguiſh *Primitive Philoſophy*, from *Metaphyſick*, which heretofore hath been confounded and taken for the ſame thing. The one we have ſet down as a *commune Parent of all Sciences*; the other, as a portion of *Natural Philoſophy.* We have aſſign'd Common and Promiſcuous *Axioms* of Sciences, to *Primitive Philoſophy.* Likewiſe all *Relative and Adventive Conditions and Characters of Eſſences*, which we have named *Tranſcendents*; as *Multitude, Paucity, Identity, Diverſity, Poſſible,*

Poſſible, *Impoſſible*, and ſuch like; we have attributed to the ſame, only with this Proviſo, that they be handled as they have efficacy in nature; and not Logically. *But we have referred* the inquiry concerning *God*; *Unity*, *Bonity*, *Angels*, *Spirits*, to *Natural Theology*. Wherefore now it may rightly be demanded, what after all this is remaining to *Metaphyſick!* certainly beyond nature, nothing; but of nature it ſelf the moſt excellent part. And indeed without prejudice to Truth, we may thus far concurr with the opinion and conceit of Antiquity; that *Phyſick* only handleth that which is inherent in matter, and is moveable; *Metaphyſick* things more abſtracted and fixt. *Again that Phyſick* ſuppoſeth exiſtence only and Motion; and natural Neceſſity: but *Metaphyſick* the Mind alſo; the Idea or platform. For to this point perchance the matter comes, whereof we ſhall diſcourſe. But we will propound this difference, (leaving aſide the ſublimity of ſpeech) perſpicuouſly and familiarly. We have divided *Natural Philoſophy* into the Inquiſition of cauſes; and the production of effects. The inquiry of cauſes we have referred to the Theorical part of *Philoſophy*; which we have divided into *Phyſick and Metaphyſick*; wherefore by neceſſary conſequence the true difference of theſe two Theories, muſt be taken from the nature of the Cauſes which they enquire; ſo without all obſcurity or circuit, *Phyſick* is that which enquires of the *efficient cauſe*; and of the *Matter*; *Metaphyſick*, that which enquires of the *Form and end.*

II *Phyſick* therefore comprehends Cauſes variable and incertain, and according to the nature of the ſubject moveable and changing, and attains not a fixt conſtancy of Cauſes.

Limus ut hic dureſcit, & hæc ut cæra liqueſcit
Uno eodemque igni——

Virg. Æn. 8.

Fire is cauſe of induration, but reſpective to clay; Fire is cauſe of colliquation, but reſpective to wax. We will divide *Phyſick* into three Knowledges: For Nature is either united and collected into one; or diffuſed and diſtributed: Nature is collected into one either in reſpect of the *common Seeds and Principles of all things*; or in reſpect of the *entire, total Fabrick of the univerſe.* This union of Nature hath brought forth two Parts of *Phyſick*, one of the *Principles of Things*; the other of the *Fabrick of the Univerſe*, or of the World; which we uſe to call the Doctrines of *Summs* or *Totals*. *The Third Knowledge* which handles Nature *diffuſed*, or *ſcattered*, exhibits *all the variety of things*, and the leſſer *Summs* or *Totals*. Wherefore from theſe contemplations it is plainly manifeſt, that there are three Knowledges touching *Natural Philoſophy*, *of the Principles of things*; *of the world*; *or of the Fabrick of things* Of Nature *multiplicious or ſparſed*; which laſt Part, (as we have ſaid) contains all the variety of things; and is, as it were, the firſt Gloſs, or Paraphraſe touching the *Interpretation of Nature*, Of theſe three Parts, none is wholly *Deficient*; but in what truth and Perfection they are handled, I make not now my judgment.

III. But we will again divide *Phyſick diſtinctively ſorted*, or of the *varietyof things*, into two Parts; *into Phyſick of concretes*; *and into Phyſick of Abſtracts: or into Phyſick of Creatures*; and into Phyſick of *Na-*

tures. The one (to use the terms of Logick) inquires of *Substances* with all the variety of their Adjuncts; the other of *Accidents*, or Adjuncts through all the variety of substances. *For example*, if the inquiry be of a *Lion*, or of an *Oak*, these are supported by many and divers Accidents: Contrarywise if the enquiry be made of *Heat*, *or Heavineſs*, these are in many distinct substances. And seeing all *Physick or Natural Philosophy* is situate in a middle term, between *Natural History and Metaphysick*; the first part (if you observe it well) comes nearer to *Natural History*; the latter part nearer to *Metaphysick*; *Concrete Physick* hath the same division which *Natural History* hath; so that it is a knowledge either concerning the *Heavens*; or concerning *Meteors*; or concerning the *Globe of the earth and Sea*; or concerning the *greater Collegiates*, which they call the *Elements*; or concerning the *lesser Collegiates*, *or natures specifick*; so likewise concerning *Pretergenerations*; and concerning *Mechanicks*. For in all these, *Natural History* inquires and reports the fact it self; but *Physick*, the Causes likewise; but you must conceive this of fluid, not fixt Causes, that is, of matter and of the efficient.

§ Amongst these Portions of *Physick*, *that part is altogether maimed and imperfect which enquires of Cœlestial bodies*; which notwithstanding, for the excellency of the Subject, ought to be taken into special consideration. For *Astronomy*, it is indeed not without some probability and use grounded upon the *Phænomena*, but it is vulgar; base, and no way solid: But *Astrology* in many Circumstances hath no ground at all. *In truth Astronomy* presents such a sacrifice to Mans understanding, as once *Prometheus* did, when he went about to couzen *Jupiter*; for instead of a true, substantial *Ox*, he presented the *hide* of a great and fair *Ox* stuft, and set out with straw, leaves, and Osier twigs; so in like manner *Astronomy* exhibiteth the extrinsick Parts of Celestial Bodies, (namely the Number, Scituation, Motion, and Periods of the stars) as the *Hide of Heaven*; fair and artificially contrived into Systems, and Schemes: but the Entrals are wanting, that is, *Physicall reasons*, out of which (adjoyning Astronomicall Hypotheses) the Theory should be extracted, not such grounds and suppositions as should only save the *Phænomena* (of which kind a number may be wittily devised) but such as propound the substance, motion and influx of the Heavens, as they truly are in nature. For those Dogmaes and Parodoxes are almost vanisht, and long agoe exploded, namely, the *Rapture of the First Mover*: and the *Solidity of Heaven* (*stars being there fixt as nails in the Arched Roof of a Parlour*). And other opinions, not much better, as, *that there are divers Poles of the Zodiack*; *and of the world*; *that there is a second moveable of Renitency*, *contrary to the rapture of the first moveable*; *that all parts of the firmament are turned about by perfect circles*; *that there are Eccentricks and Epicycles*, *to save the constancy of Motion by perfect circles*; *that the Moon hath no force or influence upon a body superior to it*, and the like. And the absurdity of these suppositions, hath cast men upon that opinion, *of the Diurnal Motion of the Earth*; *an opinion which we can demonstrate to be most false.* But scarce any man can be found, who hath made enquiry *of the Natural Causes of the substance of the heavens*, *as well Stellare*, *as Inter-stellare*; so of the *swiftness and slowness of heavenly bodies*, *referr'd one to another*; also *of the various incitation of Motion in the same Planet*; likewise *of the perpetuated course of Motion from*

Raptus 1. mobilis. Solliditas cœli. Motus renitentiæ. Poli adversi. Epicycli. Excent. Motus Terræ diurn: &c. Hypotheses imaginariæ. vide digress.

from East to West, and the contrary: Lastly *of Progressions, stations and Retrogradations, of the Elevation and Declination of Motions, by the Apogée, or middle point; and Perigée or lowest point of heaven;* so *of the oblique windings of Motions, either by flexuous Spires, weaving and unweaving themselves, as they make their approach or recess from the Tropicks; or by serpentine sinuations, which they call Dragons,* so *of the fixt Poles of Rotations or wheeling motions, why they should be placed in such a point of the heavens, rather than in any other;* so *of the alligation of some Planets at a certain distance from the Sun:* I say an inquiry of this kind, hath scarce been attempted, save that some labour hath been taken therein, only in Mathematical observations and Demonstrations. But these observations only shew how wittily all these motions may be contrived, and cleared from opposition; not how they may truly subsist in Nature; and represent only seeming Motions, and their fictitious Fabrick, and framed at pleasure, not their causes, and the real truth of Things. Wherefore *Astronomy*, such as now it is made, may well be counted in the number of *Mathematical Arts*, not without great diminution of the Dignity thereof; seeing it ought rather (if it would maintain its own right) be constitute a branch, and that most principal of Natural Philosophy. For whoever shall reject *the feigned Divorces of superlunary and sublunary bodies; and shall intentively observe the appetencies of Matter, and the most universal Passions, (which in either Globe are exceeding Potent, and transverberate the universal nature of things) he shall receive clear information concerning celestial matters from the things seen here with us: and contrarywise from those motions which are practised in heaven; he shall learn many observations which now are latent, touching the motions of bodies here below: not only so far as these inferiour motions are moderated by superiour, but in regard they have a mutual intercourse by passions common to them both.* Wherefore this part of *Astronomy* which is *natural* we set down as *Deficient.* And this we will call *Living Astronomy*, to distinguish it from *Prometheus Ox* stuft with straw, which was an Ox in outward shape only. *

§ But *Astrology* is corrupted with much superstition, so as there is hardly to be found any sound part therein. Yet in our judgment it should rather be purged, than clean cast away. But if any contend, that this science is not grounded upon reason, and Physical contemplations; but in blind experience, and the observation of many Ages; and therefore reject a trial by natural Arguments (which the Chaldee Astrologers boasted) he may by the same reason revoke Auguries, Divination, and Predictions from beasts entrals, and swallow down all kind of Fables; for all these superstitious vanities were avoucht, as the Dictates of long experience, and of Discipline delivered over by tradition. But we do both accept *Astrology*, as a Portion of Natural Philosophy; and yet attribute unto it no more credit, than reason and the evidence of Particulars do evince; setting aside superstitions and fictions. And that we may a little more seriously consider the matter.

§ *First what a vain fancy is this, that every Planet should reign for certain hours by turn, so as in the space of twenty four hours, they should resume their Dominions thrice over, three supernumerary hours reserved?* Yet this conceit brought forth unto us the Division of the week, a computation very ancient, and generally received, as from the inter-

changeable

changeable courſe of days moſt manifeſtly it appears; when in the beginning of the day immediately ſucceeding, the fourth Planet from the Planet of the firſt day, enters upon his Government; by reaſon of the three ſupernumerary hours, whereof we have ſpoken.

§ *Again we are confident to reject, as an idle fiction, the doctrine of Genethliacal Poſitures of the heavens, to preciſe points of time; with the Diſtribution of the Houſes*; thoſe ſame darlings in Aſtrology, which have made ſuch mad work in the Heavens; nor can I ſufficiently wonder that many excellent men, and for Aſtrology of Principal note, ſhould ground themſelves upon ſo ſlight reaſons, to avouch ſuch opinions. For they ſay, ſeeing that experience it ſelf diſcovers as much, that *ſolſtices, Æquinoctials, new Moons, full Moons*, and the like *greater revolutions* of ſtars, do manifeſtly and notably work upon natural Bodies; it muſt needs be, that the more exact, and ſubtile aſpect and poſture of the ſtars, ſhould produce effects more exquiſite and occult. But they ſhould firſt except the Suns operations by manifeſt heat; and likewiſe, the magnetick influence of the Moon, upon the *increaſe of Tides every half Moon* (for the daily Flux and Reflux of the Sea is another thing:) But theſe ſet aſide; the other power of the Planets upon natural bodies (ſo far as they are confirmed by experience) is ſlender and weak; and, which they ſhall find, latent in the *greater Revolutions*. Wherefore they ſhould rather argue the other way, namely, that ſeeing thoſe *greater Revolutions*, have ſo ſmall influence, *thoſe exact and minute differences of Poſitures* have no force at all.

§ *Thirdly, Thoſe Fatalities, that the hour of Nativity or conception governs the Birth; The hour of inception, the fortune of the thing begun; the hour of Queſtion, the fortune of the thing enquired; and, in a word, the ſcience of Nativities, Elections, Queſtions, and ſuch like levities; in our judgment, have no certainty or ſolidity in them; and may by natural reaſons be plainly redargued and evinced.* The point to be ſpoken of rather, is, what that is which we retain and allow of in Aſtrology; and in that which we do allow, what is deficient? for, for this end, that is, for the obſervation of *Deficients*, we undertook this work; not intending (as we have often ſaid) matter of cenſure. And indeed amongſt the receiv'd parts of *Aſtrology*, the Doctrines of *Revolutions* we judge to have more ſoundneſs in them, than the reſt. But it may be to good purpoſe, to ſet down and preſcribe certain Rules, by the ſcale and ſquare whereof, *Aſtrological* Obſervations may be examined; that what is fruitful may be retain'd; what is frivolous rejected.

§ *The firſt Precept* may be that whereof we have admoniſht already; *let the greater Revolutions be retained; the leſſer Horoſcopes and Houſes caſhiered.* Thoſe, like Great Ordnance may diſcharge their influences, at a ſpacious remoteneſs; theſe like ſmall Bows, are for a ſhort diſtance, and carry not their forces far. *The ſecond rule is*; *That the operation of the Heavens workes not on all bodies but only upon the more tender and penetrable*; ſuch as are Humours, Air, Spirits: but here we except the Operations *of the heat of the Sun, and of the Heavens*, which without queſtion pierce even to Mettals, and many ſubterraneous Bodies. *The third rule is, that the Operation of the Heavens extends rather to the Maſs of things and Nature in groſs; than unto individual eſſences, and particularities*; yet obliquely it reacheth to many Individuals, namely, thoſe

those Individuates which of the same species are most *Passible*, and are like soft wax: even as when a Pestilential air seizeth on bodies more open and less resistent; and passeth by Bodies more compact and strong. *The fourth rule is*, somewhat like the precedent; *That the Operation of the Heavens hath its influx and dominion not in points and narrow minutes of times; but in greater spaces.* Therefore *Prognostications* of the temperatures of the year may be true; but upon particular days, are worthily accounted vain and idle. *The last rule*, (which by the more wise Astrologers hath been ever embraced) is, *That there is no fatal necessity in the stars, but that they do incline rather, than enforce.* We add this moreover (wherein we plainly take part with *Astrology*, if it were rectified) and which we know to be most certain: *That Celestial bodies have other influences besides heat and light:* which influences are of force according to the Rules we have prescribed, and no otherwise: But these lie hid in the profound Parts of Natural Philosophy, and require a larger dissertation. Wherefore we think good (that which we have said being rightly conceived) to set down, *Astrology* agreeable to our Principles, amongst *Deficients*, and as we have named *Astronomy* grounded upon natural reasons, *Living Astronomy*, so we think fit to call *Astrology* ascertain'd upon the same reasons, *Sound Astrology.* As for the right way how to frame and make this Art, although what we have said, doth not a little conduce thereto, yet according to our manner, we will add a few more observations which shall clearly propound, out of what materials it should be collected, and to what end it should be referred.

§ *First, let the knowledge touching the Commixtures of Beams be receiv'd into sound Astrology*, that is of Conjunctions, and of Oppositions, and the rest of the constellations, or Aspects of Planets, one on another. *Also we assign* to this part concerning the Commixtures of Beams, the passing of the Planets through the signs of the Zodiack, and Position under the same signs: For the location of a Planet under any sign, is a kind of Conjunction of the same Planet with the Stars of the signs: Moreover as Conjunctions, so likewise Oppositions and other Constellations of Planets towards the Stars of the signs, are to be noted, which hitherto hath not perfectly been accomplisht. *But the interchangeable Commixtures* of the Rays of the fixt stars, are indeed profitable to the Contemplation of the Fabrick of the world; and of the Nature of the *Regions* lying under them; but not unto *Predictions*, because these Aspects are ever the same.

§ *Secondly, let there be taken into Astrology the Accessions of every particular Planet nearer to the Perpendicular, and Recessions from it, according to the Climates of Regions.* For all the Planets as well as the Sun, have their Summers, their Winters; wherein they dart down more forcible, or more feeble rays, according to their Posture in respect of the *Perpendicular.* For without question, *the Moon in Leo* works more forcibly upon natural bodies here below, than when she is in *Pisces*: Not because the *Moon* placed in *Leo*, hath reference to the Heart, and under *Pisces* respects the Feet, (as the vulgar Fable goes); for their Elevation towards the Perpendicular and Approximation towards the greater Stars, just after the same manner as the *Sun.*

§ *Thirdly, let the Apogæa, and Perigæa of the Planets be received with due*

due inquiry, to what the vigor of a Planet appertains in reſpect of himſelf; and to what in his vicinity to us. For a Planet in his *Apogæa*, or exaltation is more chearful and active; but in his *Perigæa* or declenſion more communicative. "*So the Sun* in his Elevation, when he enters the Interpret. additam. "Tropick of *Cancer*, is in heat more recollected and vigorous; but "when he falls off from the Meridian, as in *Capricorn*, he is more faint, "yet more diſperſed in his influence. For in his Aſcenſion, he is not only "nearer to the fixed Stars; but his beams then falling at more equal "and right angles; become more united; and by a direct reſultance "from the earth intermix, and ſo reduplicate their force; whereas in "his declenſion, they are oblique, and therefore feeble and errant in "reflection. Wherefore with the Inhabitants under the Equator, the "heat is more intenſe; than it is with Northern Confiners, where the "Sun daily keeps his circuit near about the Horizon: But yet in this "Perigean motion, the Suns beams are more communicative, though "leſs active; becauſe departing from the point of their incidence in the "rebound, their reflection is oblique and diſperſed. This enquiry "touching the projection of beams in a right or oblique line, would "be made with diligence, for it concerns all the influences of the hea-"vens upon terrene bodies; the general conſtitution of the year; the "divers temperatures of the air in the five Zones; the complexion of "different Climates and the like.

§ Fourthly, to be brief, *let there be taken in all the remaining Accidents of the motion of Planets; as what are the Accelerations, Retardations, Progreſſes, Stations, Retrogradations*, of every one of them in their courſe, what their diſtance from the *Sun*, their *Combuſtions, Encreaſe*, and *Diminutions of Light, Eclipſes*, and whatſoever elſe of this nature. For all theſe cauſe, that the *Beams* of the *Planets* do work more ſtrongly, or more weakly, and after divers ways and diſtinct virtues: And theſe four obſervations, belong to the Radiations of Star.

§ Fifthly, let there be received in, whatſoever may any way, open and diſcloſe the natures of Stars *Errant* or *Fixt*, in their proper eſſence and activity; as what is their *Magnitude*; of what *colour* and *aſpect*; what *Scintillation* and *Vibration* of light; what *Situation* towards the *Poles* or *Æquinoctial*; what *Aſteriſms*; which are more *mingled* with other Stars; which are more *ſolitary*; which are *ſuperiour*, which *inferiour*; which of the fixt Stars are within the line and courſe of the Sun and Planets (namely within the Zodiack) which without; which of the Planets is *more ſwift*; which *more ſlow*; which may *move in the Ecliptick line*; which may *expatiate in latitude* from it; what Planet may be *retrograde, which not*; what Planet may be at any diſtance from the Sun, which is tyed to attend the Sun; which moves ſwifter in *Apogéo*, which in *Perigéo*; to conclude the Irregularities of *Mars*; the expatiations of *Venus*, the wonderful Labours or Paſſions, which are often found in the *Sun*, and in *Venus*, and the like?

§ Laſt of all, let there be taken into *Aſtrologie*, even from tradition the particular Natures, and Inclination of Planets, as alſo of fixt Stars; which ſeeing they are delivered over with ſuch an univerſal conſent, they are not lightly to be rejected; but where they croſs the grounds and reaſons of natural Principles. And of ſuch obſervations

as theſe, *ſound Aſtrologie* is compiled; and according to theſe only, ſhould Schemes and configurations of Heaven, be compoſed and interpreted. *Sound Aſtrologie* is likewiſe applied and referred with more confidence to *Predictions*; to *Elections*, with more *Caution*, within due limits to both. *Predictions* may be made of future *Comets*, which as we conjecture may be foretold; and of all ſorts of Meteors; of Deluges; Droughts, Heats, Conglaciations, Earth-quakes, overflowing of Waters; breaking out of Fires, Winds, great Rains, divers Tempeſts, and ſtrange ſeaſons of the Year; Peſtilences, Epidemical diſeaſes; Plenty and dearth of Grain; Wars, Seditions, Sects, Plantations of new Colonies: laſtly, of all Commotions and greater Innovations, either in *Nature*, or in *State-Government*: ſo theſe predictions may be drawn down (though not with like certainty) to more *ſpecial occurrences*, and perchance to *ſingularities*; if the general inclinations of ſuch times and ſeaſons, being firſt diſcovered and found out, theſe be applied by a ſharp piercing judgement Philoſophical or Political, to ſpecial or more particular events, which may be moſt ſubject to ſuch *Accidents*. As for example, a man ſhall find out from a fore-ſight of the ſeaſons of the year, ſuch temperatures of Weather, as are propitious or pernitious rather to Olives, than to Vines; rather to *Phthiſicks*, and ulcerations of Lungs, than to *Hepaticks* and obſtructions of the Liver; more to the inhabitants of high and mountainous, than low and champain Countries; more to Monks than Courtiers, by reaſon of their different kind of diet: Or if one from the knowledge he hath of the influence, the Heavens have over the ſpirits of men, ſhould find out a man to be of ſuch a complexion and diſpoſition; to affect or diſtaſt rather the people than Princes; rather learned and curious, than couragious and warlike diſpoſitions; rather ſenſual and voluptuous, than active and politick natures. Such inſtances as theſe are infinite, but (as we have ſaid) they require not only that general knowledge, taken from the Stars, which are active; but alſo a particular knowledge of Subjects which are Paſſive. Nor are *Elections* altogether to be rejected, but more ſparingly to be credited, than *Predictions*. For we ſee in Planting, and in Sowing, and in Grafting, that the obſervation of the *age* of the *Moon* is a matter, not altogether vain and frivolous. But theſe *Elections*, are by our rules more reſtrained than *Predictions*: and this muſt ever be obſerved, that *Elections* are of force, in ſuch caſes alone, where both the *Influx* of the Heavens is ſuch, as doth not ſuddenly paſs over; and likewiſe the *Action* of *inferiour Bodies* ſuch, as is not preſently perfected: for neither the *Encreaſes* of the *Moon*, nor of the Planets are accompliſht in an inſtant: but *punctuality* of time, is by all means to be rejected. There are found many of the like preciſe obſervations (which a man would hardly believe) in *Elections* about Civil affairs. But if any man in this caſe ſhall except againſt us, ſaying, that we have indeed made ſome remonſtrance out of what this *reformed Aſtrologie* ſhould be deduced; and likewiſe to what it may with profit be referred: but the manner how it is to be deduced, we have given no precept at all; he ſhould not deal equally with us, to exact at our hands the Art it ſelf, which we never promiſed, or purpoſed to handle. Yet notwithſtanding touching ſuch a point of Demand, thus much we will admoniſh; that there are only four means, which may prepare the way

to this knowledge. *First, by Experiments future, then by Experiments past:* Again, *by Tradition*; last of all, *by natural Reasons. Now for future Experiments*, to what end should we speak much of them? seeing to make up a competent number of Instances, so many ages are requisite, as it were, but lost labour, to think to comprehend it? *As for Experiments past*, they indeed are within the compass and reach of men, although it is a matter will require much labour, and much leisure to accomplish. For *Astrologians* (if they be not wanting to their Profession) may make a collection from the faithful reports of History, of all greater contigences; as *Inundations, Pestilences, Wars, Seditions*, and (if the state so require) *the deaths of Kings:* and may contemplate the *situation of the Heavens*, not according to the subtilty of *Figures*; but according to those general rules which we have already set down, to know in what postures the Heavens were, at those times, when such effects came to pass; that so where there is a clear, and evident consent, and concurrence of events; there a probable rule of *Prediction* may be inferred. *As for Traditions*, they ought to be so examined and sifted, that such as manifestly oppugn *Physical Reasons*, should be discarded; but such as well consent, should be valid even of their own authority. *Lastly, as for Physical or Natural reasons*, they are the aptest for this inquiry; which make inquiry of the Catholick, and more universal inclinations and Passions of Matter, and of the simple and genuine motions of Bodies; for by these wings we safely soar and mount up to those celestial materiare substances. Thus much concerning *Astrologia sana.*

§ *There is another Portion of Astrological Frenzie* (besides those figments which we have noted at the beginning) which is wont to be seperate from *Astrologie*, and to be transferred into *Celestial Magick*, as they call it. This hath purchased a strange Gloss, from the working fancie of mans wit; namely, *That a benevolent situation or aspect of Stars, may be taken in seals and signet-rings (be it of Metals, or of any Gemm, capable of such impression) which may arrest the felicity of that hour, which otherwise would swiftly pass away, and as it were, fix it, being volatilous.* As the Poet passionately complains of this so noble Art, among the Ancients, now long ago buried in oblivion.

C. Agrip. de Occult. Ph. I.

Annulus infuso non vivit mirus Olympo,
Non magis ingentes humili sub lumine Phœbos
Fert Gemma, aut Celso divulsas cardine lunas.

N.L.

Indeed the Church of *Rome* hath imbraced the *Reliques of Saints*, and their virtues, (for in Divine and immateriate things, the flux of time hath no power to abate the force and efficacy) but that the *Reliques of Heaven* should be so lodged, as that the hour which is past, and, as it were, dead, should revive and be continued; is a meer superstition, and impostur. Wherefore let us let go these idle fancies, unless the Muses be grown doting old Wives.

IV. *Abstract Physick in our judgement, may very well be divided into two Parts, into the Doctrine of the Schemes of Matter; and into the doctrine of Appetites or Motions.* We will run them both over briefly, from whence the delineations of the true Physick of Abstracts may be drawn

drawn. The *Schemes of Matter* are; *Denſe, Rare*; *Grave, Light*; *Hot, Cold*; *Tangible, Pneumatick*; *Volatile, Fixt*; *Determinate, Fluid*; *Humid, Dry*; *Fat, Crude*; *Hard, Soft*; *Fragile, Tenſile*; *Porous, United*; *Spirituous, Languid*; *Simple, Compoſite*; *Abſolute, imperfectly Mixt*; *Fibrous and full of veins, of a ſimple Poſiture or equal*; *Similar, Diſſimilar*; *Specificate, Non-ſpecificate*; *Organical, Inorganical*; *Animate, Inanimate.* Neither do we extend the figurations of Matter any farther, for *Senſible and Inſenſible*; *Rational and Irrational*, we refer to the knowledge of Man.

§ *Appetites and Motions*, are of two ſorts; either *motions ſimple*, which contain in them the Roots of all natural Actions; but yet according to the *Schemes and habitudes of Matter*: or *Motions compoſited and produced*; from which laſt, the received Philoſophy of the Times (which comprehends little of the Body of Nature) takes its beginning. But ſuch *Compound Motions* (as *Generation Corruption*, aud the reſt) ſhould be taken for the *ſumms* and *products* of ſimple Motions; rather than for *Primitive Motions*. *Motions ſimple*, are Motions of *Antitypie*, commonly called *Motion oppoſing Penetration* of Dimenſions; *Motion of Connexion, or Continuity*, which they call, Motion to avoid vacuity; *Motion of Liberty*, leſt there ſhould be any compreſſion or extenſion preternatural; *Motion into a new ſphere*, or to Rarefaction and Condenſation; *Motion of a ſecond connexion*, or a motion leſt there ſhould be a ſolution of continuity; *Motion of greater Congregation*, or to the Maſs of their connaturals, which is commonly called Natural Motion; *Motion of leſſer Congregation*, uſually ſtiled, Motion of Sympathy and of Antipathy; *Motion Diſponent*, or that parts may be rightly placed in the whole; *Motion of Aſſimilation*, or of Multiplication of its Nature upon another; *Motion of Excitation*, where the more noble and vigorous agent awaketh, and ſtirs up Motion latent and dormant in another; *Motion of the Seal or of Impreſſion*, that is, Operation without Communication of Subſtance; *Motion Regal*, or a Cohibition of other Motions from a Motion Predominant; *Motion without Termination*, or Spontaneous Rotation; *Motion of Trepidation*, or of Contraction and Dilatation of Bodies placed betwixt things good for them, and obnoxious to them; *laſtly, Motion of Reſt or abhorrency of Motion*, which is the Cauſe of many things. Of this kind are *ſimple Motions* which truly iſſue forth out of the inward bowels of Nature; which complicate, continuate, interchang'd repreſs'd, repeated, and many ways aggregated, do conſtitute thoſe *Compoſite Motions* or *Summs* of Motions, which are receiv'd, and ſuch other of the ſame kind. *The Summs of Motions* are thoſe Celebrated Motions, *Generation, Corruption, Augmentation, Diminution, Alteration and Lation, ſo Mixtion, Separation, Verſion.*

§ *There remains only as Appendices of Phyſick, the Meaſures of Motions*; of what efficacy the *Quantity*, or Doſe of Nature is? *What diſtance* can do, which is called, not unproperly, the orb of Virtue or Activity? *What incitation, or Tardity*, can effect? *What a long or ſhort delay? What the force or rebatement* of a thing? *What the inſtigation of Periſtaſie* or circumambient incloſure? And theſe are the natural and genuine Parts of true natural Philoſophy, touching *Abſtracts. For in the figurations, or Schemes of Matter*; *in Motions ſimple*; *In ſumms or Aggre-*

gations of Motions; and in Measures of Motions, the Physick of Abstracts is accomplisht. As for voluntary Motion in Animals; Motion in the Actions of Senses; *Motion of the Imagination; of the Appetite*, and of *the will*; *Motion of the mind; of the discerning faculty*, or Practick Judgement; and of the *Intellectuals*, we refer over to their proper Knowledges. *Yet thus much again* we advertise, that all these Particulars we have delivered, are no farther to be handled in *Physick*, than the enquiry of their *Matter* and *Efficient*; for according to their Forms and Ends they are revised and re-examined in *Metaphysick*.

V. *We will here annex two notable Appendices*, which have reference not so much to the Matter, as to the Manner of Inquiry; *Natural Problems; and Placits of Ancient Philosophers.* The first is the *Appendix of multiplied or sparsed Nature*; the second *of Nature united or of summs.* Both these belong to a grave and circumspect *moving of doubts*, which is no mean part of Knowledge: For *Problems* comprehend *particular Dubitations*; *Placits*, general; about *Principles* and the *Fabrick*. *Of Problems there* is an excellent example in the writing of *Aristole*; which kind of work certainly deserv'd not only to have been celebrated by Posterity; but by their labours to have been continued; seeing new *doubts* arise daily. But in this point Caution is to be taken, and that of great Importance. The recording and proposing of *Doubts* hath in it a two-fold use: *One*, that it munites and fortifies Philosophy against errors; when that which is not altogether so clear and evident is not defin'd and avouched, (lest error should beget error) but a judgement upon it is suspended, and is not definitive. *The other*, that the entry of *Doubts*, and recording of them, are so many Sponges which continually suck and draw in unto them an increase and improvement of Knowledge; whereby it comes to pass that those things, which without the suggestion of Doubts had been slightly, and without observation passed over, are by occasion of such *Dubitations*, more seriously and attentively considered. But these two utilities scarce recompence one discommodity, which unless it be carefully lookt unto, insinuateth it self; namely, *That a doubt once acknowledged as justly made, and become, as it were, authentick; presently stirs up defendants both ways; who in like manner commend over the same liberty of doubting to Posterity; so that men bend and apply their wits, rather to keep a doubt still on foot, than to determine and solve it.* Instances of this case we have every where, both in Jurisconsults; and in Students in the Universities; who if they have once entertain'd a *Doubt*, it goes ever after authoriz'd for a *Doubt*, assuming unto themselves a priviledge, as well of *Dubitation*, as of *Assertion: Whereas the right use of Reason is, to make things doubtful certain; and not to call things certain, into doubt: Wherefore I report as Deficient a Calendar of Dubitations*, or *Problems* in Nature, and approve the undertaking of such a work, as a profitable pains; so care be had, that as knowledge daily grows up, (which certainly will come to pass, if men hearken unto us) such *Doubts* as be clearly discust, and brought to resolution, be rased out of the *Catalogue of Problems*. To this *Calendar*, I would have another annext no less useful: *For seeing that in all Enquiries, there be found these three sorts of things; things manifestly true; Doubtful; manifestly false:* It would be a very profitable course to adjoyn to the *Calendar of Doubts*, and *Non-liquets*; a *Calender of Falsehoods*,

Aristot. Probl.

and

and of *popular Errors*, now palling unargued in Natural History, and in Opinions; that Sciences be no longer distemper'd and embased by them.

§ *As for the Placits of Ancient Philosophers*, as were those of *Pythagoras*, *Philolaus*, *Xenophon*, *Anaxagoras*, *Parmenides*, *Leucippus*, *Democritus*, and others, (which men use disdainfully to run over) it will not be amiss to cast our eyes with more reverence upon them. *For although Aristotle, after the manner of the race of the Ottomans, thought he could not safely reign, unless he made away all his Brethren*; yet to those who seriously propound to themselves the inquisition and illustration of *Truth*, and not *Dominion* or *Magistrality*, it cannot but seem a matter of great profit, to see at once before them, the several opinions of several Authors touching the Natures of things. Neither is this for any great hope conceiv'd, that a more exact truth can any way be expected from these or from the like Theories. For as the same *Phænomena*; the same *Calculations* are satisfied upon the Astronomical Principles both of *Ptolomy* and *Copernicus*: So the popular experience we embrace; and the ordinary view and face of things, may apply it self to many several Theories; whereas a right investigation of truth requires another manner of severity and speculation. For as *Aristotle* saith elegantly, *That Children at first indeed call all men Fathers, and women Mothers, but afterwards they distinguish them both*: So certainly experience in Childhood, will call every *Philosophy*, *Mother*; but when it comes to ripeness, it will discern the true Mother. In the mean time it is good to read over divers *Philosophies*, as divers Glosses upon Nature; whereof, it may be, one in one place; another in another, is more corrected. Therefore I could wish a collection made, but with diligence and judgment, *De Antiquis Philosophiis*, out of the lives of Ancient Philosophers; out of the Parcels of *Plutarch* of their *Placits*; out of the Citations of *Plato*; out of the Confutations of *Aristotle*; out of a sparsed mention found in other Books as well of Christians, as of Heathens, (as out of *Lactantius*, *Philo*, *Philostratus*, and the rest): *For I do not yet see extant a work of this Nature.* But here I must give warning, that this be done distinctly, so as the *Philosophies*, every one severdly, be composed and continued, and not collected by titles and handfuls, as hath been done by *Plutarch*. *For every Philosophy while it is entire in the whole piece, supports it self; and the opinions maintained therein give light, strength, and credence mutually one to the other; whereas if they be simple and broken, it will sound more strange and dissonant.* In truth when I read in *Tacitus* the Actions of *Nero*, or of *Claudius* invested with Circumstances of Times, Persons, and inducements: I find them not so strange, but they may be true: but when I read the same Actions in *Suetonius Tranquillus*, represented by titles and common places, and not in order of Time, they seem monstrous and altogether incredible: *So is Philosophy when it is propounded entire; and when it is sliced and articled into fragments.* Neither do I exclude out of this *Calendar of the Placits, or Stoffs of Philosophy*, the Theories and opinions of later times, as that of *Theophrastus Paracelsus* eloquently reduced into a body and Harmony of Philosophy by *Severinus* the Dane, or of *Telesius of Cosenza*, who reviving the Philosophy of *Parmenides* hath turn'd the weapons of the Peripatetick upon themselves, or of *Patri-*

Aristot.

Phys. 1.

De Antiquis Philosophiis.

Tacit.

Suet.

cius

cius the *Venetian*; who hath ſublimated the fumes of the *Platoniſts*; or of *Gilbert* our Countryman, who hath reſtored to light the opinions of *Philolaus*; or of any other whatſoever, if he be of merit. And becauſe the volumes of theſe Authors are wholly extant, there may be abridgements made only of them, and ſo annext, by way of reference to the reſt. And thus much of *Natural Philoſophy*, and the *Appendices* thereof.

VI. *As for Metaphyſick, we have aſſigned unto it, the inquiry of* Formal *and* Final *cauſes; which application, as to Forms, may ſeem to be*
* *nugatory and void.* For an opinion hath prevailed; and is grown in-
Formæ. Rerum. veterate, that the *eſſential Forms* and *true Differences* of things, can by no diligence of Man be found out. Which opinion in the mean, gives and grants us thus much; that the *Invention of Forms*, is of all other parts of knowledge the worthieſt to be ſought; if it be poſſible they may be found. And as for Poſſibility of Invention, there are ſome faint-hearted diſcoverers; who when they ſee nothing but Air and Water, think there is no farther Land. But it is manifeſt that *Plato*, a man of
In Timeo alibi. an elevated wit, and who beheld all things as from a high cliff, in his doctrine of Ideas, did deſcry, *that forms were the true object of knowledge, however he loſt the real fruit of this moſt true opinion, by contemplating and apprehending* Forms, *as abſolutely abſtract from matters; and not confined and determined by matter: whereupon it came to paſs that he turned himſelf to Theological ſpeculations, which infected and diſtained all his Natural Philoſophy.* But if we keep a watchful, and a ſevere eye upon Action and Uſe, it will not be difficult, to trace and find out what are the *Forms*; the diſcloſure whereof would wonderfully enrich and make happy the eſtate of man. *For the Forms of ſubſtances*, (man only except, of whom it is ſaid, *Formavit hominem de limo terræ, & ſpiravit in faciem ejus ſpiraculum vitæ*; not as of all other kinds, *Producat aqua, producat terra*) I ſay the ſpecies of creatures, as they are now multiplied by compounding and tranſplanting, are ſo perplext and complicate, as it is either altogether loſt labour to make enquiry of them, or the inquiſition thereof, ſuch as as may be had, ſhould be ſuſpended for a time, and when the *Forms* of nature, in her more ſimple exiſtence are rightly ſought and found out, then to be determin'd and ſet down. For, as it were not a thing eaſie, nor any way uſeful, *to ſeek the Form of that ſound, which makes a word*; being that words through compoſition, and tranſpoſition of letters are infinite: *but to enquire the Form of ſound, which expreſſeth ſome ſimple letter* (namely with what colliſion, with what application of the inſtruments of voice it is made) is a thing comprehenſible and eaſie; *which form of letters once known, preſently leads us to the form of words.* In the ſame manner to enquire the form of a Lyon, of an Oak, of Gold, nay of Water, of Air, is a vain purſuit; but to enquire the *Forms* of *Denſe*, *Rare*; *Hot*, *Cold*; *Heavy*, *Light*; *Tangible*, *Pneumatick*; *Volatile*, *Fixt*; and the like, both of *Figurations* and of *Motions*; whereof the moſt of them we have enumerated when we handled *Phyſick*, and are wont to call them, *Forms of the firſt rank or order*; and which (as the letters of the Alphabet) are not ſo many in number, and yet build up and ſupport the *Eſſences and Forms* of all ſubſtances. And this is that very point, which we aim at, and endeavour to compaſs; and which conſtitutes and defines that part
Gen. 2. Gen. 1.

of

of *Mataphyſick*, whereof we now enquire. Nor doth this ſo prejudicate or hinder, but that *Phyſick* may conſider the ſame Natures alſo (as hath been ſaid) bnt only according to the fluid and mutable cauſes. *For example*, if the cauſe of *whiteneſs in Snow or in Froth* be enquired, it is well rendred, *that it is the ſubtile intermixture of Air with water.* But this is far from being the *Form of whiteneſs*; being that Air intermixt with the duſt, or powder of Glaſs, or Chryſtal, doth likewiſe produce *whiteneſs*, as well as if it were mingled with water; but this is the efficient cauſe only, which is no other than *vehiculum Formæ*. But if the enquiry be made in *Metaphyſick*, you ſhall find ſome ſuch rule as this, *That two diaphanous bodies being intermixt, their optick Portions in a ſimple order, or equally placed, do determine and conſtitute whiteneſs.* This part of *Metaphyſick I find deficient:* and no marvail, becauſe by the courſe of enquiring, which hitherto hath been practiſed, the *Forms of things* will never appear, while the world endures. *The root of this error, as of all other, is this; that men in their contemplations of nature are accuſtomed to make too timely a departure, and too remote a receſs from experience and particulars; and have yielded and reſigned themſelves wholly over to the fumes of their own fancies, and popular Argumentations.* But the uſe of this part of *Mntaphyſick, which I report as deficient*, is of the reſt the moſt excellent in two reſpects.

§ *Firſt*, becauſe it is the duty and peculiar virtue of all Sciences, to abridge (as much as the conception of truth will permit) the ambages and long circuits of Experience, and ſo to apply a remedy to the ancient complaint of *vita brevis, ars longa.* And this is excellently performed, *by collecting and uniting the Axioms of Sciences, into more general heads and conceptions*; which may be agreeable to all Individuals. *For Sciences, are the Pyramids ſupported by Hiſtory; and Experience as their only and true Baſis; and ſo the Baſis of Natural Philoſophy is Natural Hiſtory; the ſtage next the Baſis is Phiſick; the ſtage next the vertical point is Metaphyſick:* as for the *Cone* and *vertical point* it ſelf (*opus quod operatur Deus à principio uſque ad finem*; the *ſummary law of Nature*) we do juſtly doubt, whether mans enquiry can attain unto it. But theſe three be the true *ſtages of Sciences*; and are, to men ſwelled up with their own knowledge, and a daring inſolence, to invade Heaven, like the three hills of the *Giants*.

Hipp. Aphor.

Eccleſ. 3.

Ter ſunt Conati imponere Pelion Oſſæ,
Scilicet atque Oſſæ frondoſum involvere Olympum.

Virg. Geor. 1.

But to thoſe that diſabling themſelves, and diſcharging their pride, refer all to the glory of God, they are the three acclamations, *Sanctè, Sanctè, Sanctè: for God is holy in the multitude of his works, Holy in the order of them, Holy in the union.* And therefore the ſpeculation was excellent in *Parmenides* and *Plato*; although but a ſpeculation in them, *That all things by ſcales did aſcend to unity.* So then, that ſcience is the worthieſt, which leaſt chargeth mans underſtanding with multiplicity; and it is evident, that that is *Metaphyſick*, as that which principally ſpeculates *thoſe ſimple Forms of things*; (which we have ſtiled *Forms of the firſt degree* or order) which though they be few in number, yet in their Commenſurations and Co-ordinations, they make all kinds of variety.

Apoc. 4.

In Parm.

§ *The*

§ *The Second* respect which enobles this part of *Metaphysick* touching *Forms*, is, that of all other sciences, it doth most enfranchise, and set at liberty the Power of Man; and brings it forth into a most ample and open field to exercise in. For *Physick* directs mans labour and diligence through narrow and restrained ways, imitating the flexious courses of ordinary Nature; But *latæ undique sapientibus viæ*, to *sapience* (which was anciently defined to be, *Rerum divinarum & humanarum scientia*) there is ever copy and variety of means. For Physicall causes give light and occasion to new inventions in *simili materia*; but whosoever knows any *Form*, knows also the *utmost possibility of superinducing that nature upon any variety of matter*; and so is less restrained and tied in operation, either to the Basis of the *matter*, or to the condition of the *Efficient*; which kind of knowledge, though in a more divine sence, *Solomon* legantly describes, *Non arctabuntur gressus tui, et Currens non habebis offendiculum*; his meaning is, that the ways of *sapience*, are not liable to streights, nor perplexities.

Plat. in Phæd. Cic. de Fin. 2. Tusc. 4.

Prov. IV.

§ *The second part of Metaphysick*, is the enquiry of *Final Causes*; which we note not as omitted, but as misplaced: for the enquiry of them usually is made amongst the *Physicks*, and not in the *Metaphysicks*. And yet if this were a fault in *order* only, I should not much stand upon it; for *order* is a matter of Illustration, and pertains not to the substance of *Sciences*: but this inversion of *order*, hath caused a notable *deficience*, and brought a great decay upon Philosophy. For the handling of *Final Causes* in the *Physicks*, hath intercepted, and banisht the enquiry of *Physical Causes*; and hath given men occasion to rest satisfied in such specious, and umbratilous Causes; and not thorowly to urge and press the enquiry of *real and truly Physical Causes*. For this I find done not only by *Plato*, who ever Ancreth upon that Shore; but also by *Aristotle*; *Galen*, and others, who usually likewise fall upon these Flats. For to say, *That the eye-lids furnisht with hairs are for a quick-set and fence to fortifie the the sight: or that the firmness of skins, and hides of living Creatures, is to repel the extremities of heat and cold: or that Bones are ordained by Nature for Columns and Beams whereupon the frame of the Body is to be built: or that Trees shoot forth leaves to shadow and protect the fruit from the Sun and the wind: or that the Clouds are ingendred above, to water the earth below: or that the Earth is close, compact and solid, that it may be a Station and Mansion for living Creatures*; is properly enquired in *Metaphysick*; but in *Physick* they are impertinent. Nay, (to pursue this point) *such discoursing Causes as these, like the Remoraes (as the fiction goes) adhering to ships, stay and slug the sayling, and the Progress of Sciences, that they could not hold on their Course, and advance forward to further Discoveries: And now long ago it is so brought to pass, that the search of Physical Causes, thus neglected, are decayed and passed over in silence.* And therefore the *Natural Philosophy* of *Democritus*, and some others, who removed God and a Mind from the frame of things; and attributed the structure of the world to infinite Preludiums, and Essays (which by one name they term'd *Fate* or *Fortune*; and have assigned the Causes of Particulars to the necessity of Matter, without intermixture of *Final Causes*) seemeth to us (so far as we can conjecture from the Fragments and Remains of their Philosophy) in respect of *Physical Causes*, to have been far more solid, and to have penetrated more profoundly into Natnre; than

Arist. Probl.

than that of *Ariſtotle* and *Plato for this reaſon alone, that thoſe Ancient Philoſophers never waſted time in final Cauſes; but theſe perpetually preſs and inculcate them.* And in this point *Ariſtotle* is more to blame than *Plato*, ſeeing he hath omitted the fountain of all final Cauſes, *God*; and in the place of *God* ſubſtituted Nature; and hath imbraced *final Cauſes* rather as a lover of *Logick*, than an adorer of Divinity. Nor do we therefore ſpeak thus much, becauſe thoſe *final Cauſes* are not true, and very worthy the enquiry in *Metaphyſick Speculations*; but becauſe, while they ſally out, and break in upon the Poſſeſſions of *Phyſical Cauſes*, they do unhappily depopulate and waſte that Province: For otherwiſe, if they keep themſelves within their precincts and borders, they are extremely deceiv'd, who ever think that there is an enmity or repugnancy between *them* and *Phyſical Cauſes*. For the cauſe render'd, *That the hairs about the eye-lids are for the ſafe-gard of the ſight*, doth not indeed impugn that other Cauſe; *That piloſitie is incident to Orifices of Moiſture*,

Muſcoſi Fontes, &c.—— Virg. Buc.

Nor the Cauſe render'd, *that the firmneſs of Hides is in Beaſts for armor againſt the injuries of extreme weather*, doth impugn that other Cauſe; *That that firmneſs is cauſed by the contraction of pores in the outward parts of the body through cold, and depredation of Air*; and ſo of the reſt: both cauſes excellently conſpiring, ſave that, the one declares an intention, the other a conſequence only: Neither doth this call in queſtion, or derogate from divine *Providence*; but rather wonderfully confirms and exalts it. *For as in* Civil Actions, that Politick wiſdom will be more deep, and admired, if a man can uſe the ſervice of other men to his own ends and deſires; and yet never acquaint them with his purpoſe (ſo as they ſhall do what he would they ſhould do, and yet not underſtand what they do); then if he ſhould impart his counſels to thoſe he imploys: So the wiſdom of God ſhines more wonderfully, when Nature intends one thing, and *Providence* draws forth another; then if the Characters of *Divine Providence* were impreſt upon every particular habitude and motion of Nature. Surely *Ariſtotle*, after he ſwelled up Nature with *Final Cauſes*; *Naturam nihil fruſtra facere*; *ſuique voti ſemper eſſe compotem* (*ſi impedimenta abeſſent*); and had ſet down many ſuch tending to that purpoſe; *had no farther need of God*: But *Democritus* and *Epicurus*, when they publiſht and celebrated their *Atoms*; were thus far by the more ſubtile wits liſtned unto with Patience: but when they would avouch, that the Fabrick and Contexture of all things in Nature, knit and united it ſelf without a *Mind*, from a fortuitous Concourſe of thoſe *Atoms*, they were entertain'd with laughter by all. So that *Phyſical Cauſes* are ſo far from withdrawing mens minds from *God* and *Providence*; as rather contrariwiſe thoſe Philoſophers which were moſt exerciſed in contriving thoſe Atoms, found no end and iſſue of their travail, until they had reſolved all at laſt into *God* and *Providence*. Thus much of *Metaphyſick*, a part whereof touching *Final Cauſes* I deny not to have been handled both in the Phyſicks and Metaphyſicks; in theſe truly, in thoſe improperly; for the inconvenience hath enſued thereupon.

De Cœlo, lib. 1. & lib. de part. a. nimal.

CHAP. V.

I. The Partition of the Operative Knowledge of Nature into *Mechanick and Magick:* Respondent to the parts of Speculative Knowledge; *Mechanick to Physick*; *Magick to Metaphysick.* § A purging of the word *Magia.* II. Two Appendices to Operative Knowledge, *An Inventary of the Estate of man. A Catalogue of Polychrests, or things of multifarious use.*

I. THE *Operative knowledge of Nature*, we will likewise divide into two Parts; and that from a kind of Necessity. For this *Division* is subordinate to the former *Division of Speculative Knowledge*; *for Physick, and the Enquiry of Efficient and Material Causes, produces Mechanick: but Metaphysick, and the enquiry of Forms produces Magick: As for Final Causes, the enquiry is barren, and as a Virgin consecrate to God brings forth nothing.* Nor are we ignorant that there is a *Mechanical Knowledge*, which is meerly *emperical*, and *operary*, not depending on *Physick*; but this we have referr'd to *Natural History*, and separate it from *Natural Philosophy:* Speaking here only of that *Mechanical* Knowledge which is connext with *Causes Physical.* But yet there falls out a certain *Mechanical*, or experimental Knowledge which neither is altogether *Operative*, nor yet properly teaches so high as speculative *Philosophy:* For all the Inventions of Operations which have come to mens Knowledge, either have fallen out by casual incidence; and afterwards deliver'd from hand to hand, or were sought by a purposed experiment. Those which have been found out by intentional experiment, they have been discloſed either by the light of *Causes*, and *Axioms*; or found out by extending, or transferring, or compounding former inventions; which is a matter more sagacious and witty, than Philosophical. And this part which by no means we despise, we shall briefly touch hereafter, when we shall treat of *Literate experience* amongst the parts of *Logick.* As for the *Mechanick* now in hand, *Aristotle* hath handled it promiscuously; *Hero in Spiritalibus*; as likewise *Georgius Agricola* a modern Writer, very diligently in his *Minerals*; and many others in particular Treatises on that subject; so as I have nothing to say of *Deficients* in this kind; but that the *promiscuous Mechanicals of* Aristotle, ought to have been with more diligence continued, by the pens of recent Writers; especially with choice of such experimentals, of which either the Causes are more obscure, or the Effects more noble. But they who insist upon these, do, as it were, only coast along the shoar, *Premendo littus iniquum.* For in my judgement there can hardly be any radical alteration, or novation in Nature; either by any fortuitous adventures; or by essays of Experiments; or from the light of Physical Causes; but only through the invention of *Forms.* Therefore if we have set down that part of *Metaphysick* as *Deficient*, which entreateth of *Forms*; it follows that *Natural Magick* also, which is a Relative unto it, is likewise *Defective.*

§ But

§ But it ſeems requiſite in this place that the word *Magia*, accepted for a long in the worſe part, be reſtored to the ancient and honourable ſence. *Magia amongſt the Perſians*, was taken for a ſapience, and a Science of the harmony and contents of univerſals in Nature; ſo thoſe three *Eaſtern Kings* which came to adore *Chriſt*, are ſtiled by the name of *Magi:* and we underſtand it in that ſence, as to be, *a Science which deduceth the knowledge of hidden forms to ſtrange and wonderful effects and operations; and as it is commonly ſaid, by joyning Actives with Paſſives, which diſcloſeth the great wonders of Nature.* As for the *Natural Magick*, (which flies abroad in many mens books) containing certain credulous and ſuperſtitious traditions, and obſervations of *Sympathies*, *and Antipathies*, and of hidden and ſpecifick proprieties, with ſome experiments commonly frivilous; ſtrange, rather for the art of conveyance and diſguiſement, than the thing it ſelf; ſurely he ſhall not much err, who ſhall ſay, that this kind of Magick, is as far differing in truth of Nature, from ſuch a knowledge as we require; as the Books of the Geſts of *Arthur* of *Britain*, or of *Hugh* of *Burdeaux*, differs from *Cæſars* Commentaries in truth of ſtory. For it is manifeſt, that *Cæſar* did greater things *de vero*, than they durſt feign of their *Heroes*; but he did them not in that fabulous manner. *Of this kind of Learning, the Fable of* Ixion *was a figure*; who projecting with himſelf to enjoy *Juno* the Goddeſs of Power, had copulation with a *cloud*, of which he begot *Centaurs* and *Chimeraes*. So whoever are carried away with a frantick and impotent paſſion, and vaporous conceit to thoſe things, which only, through the fames and clouds of Imagination, they fancy to themſelves to ſee, in ſtead of ſubſtantial operations; they are delivered of nothing but airy hopes, and certain deformed and monſtrous apparitions. The operation and effect of this ſuperficiary, and degenerous *Natural Magick* upon Men, is like ſome ſoporiferous drugs, which procure ſleep; and withal exhale into the fancy, merry and pleaſant dreams in ſleep. *Firſt*, it caſts mans underſtanding into a ſleep, ſtill chanting and ſuggeſting ſpecifick proprieties, and ſecret virtues; and ſet down, as it were, from heaven, to be delivered, and to be learned only by auricular traditions; whence it comes to paſs, that men are no more ſtirred up and awaked to ſearch with diligence, and to force out the true cauſes; but ſit down ſatisfied with theſe frivolous and credulous opinions: and then inſtills an infinite number of pleaſing fictions, in the manner of dreams, and ſuch as one would moſt wiſh to be true. And it is worth the pains to note, that in theſe Sciences, which hold ſo much of *imagination* (as are that *adulterate Magick*, whereof we now ſpeak, *Alchymie*, *Aſtronomy*, and the like) the means and Theory are ever more monſtrous, than the end and pretences. *The turning of Silver* or *Quick-ſilver*, or any other metal into Gold, as a hard thing to believe: yet it is a thing far more probable, to a man well skilled, and experimented in the natures of weight, yellow, colour, malleable and extenſible; as alſo fixt and volatile: and likewiſe to one who hath exactly ſearcht into the firſt ſeeds and menſtruous Purgings of Minerals; that Gold by an induſtrious and curious wit, may, at laſt, be produced; than that a few grains of *Elixir*, or of the power of Production, ſhould be of force,

in a few Minutes, to turn Metals into Gold, by the activity of the ſame *Elixir*; which is able to perfect Nature, and to deliver it from all impediments. *So the retarding of Age*, or the reſtoring of ſome degree of youth, doth not eaſily purchaſe a belief: yet it is far more likely to a man that knows perfectly the nature of *Arefaction*, and the depredations of the ſpirits, upon the ſolid parts of the body; and hath throughly obſerved the nature of Aſſimulation, and of Alimentation; either more perfect or more peccant; alſo the nature of the Spirits and of the Flame (as it were) of the body, aſſigned ſometimes to conſume, ſometimes to repair; may by Diets, Bathings, Anointings, proper Medicines, and accommodate Motions, and the like, *prolong life*, or renew ſome degrees of youth, or vivacity: then that this ſhould be effected, by a few drops or ſcruples of *ſome precious Liquor* or Quinteſcence. *Again, that Fates may be drawn from the Stars*, men will not ſuddenly, and eaſily aſſent unto; but theſe, that the hour of Nativity (which oftentimes through many natural accidents, is either accelerated or differed) ſhould govern the fortune of the whole life, or that the hour of Queſtion is co-fatal with the thing it ſelf which is ſought, you will ſay are meer impoſtures. But ſuch a raſh impotency and intemperance, doth poſſeſs and infatuate the whole race of man; that they do not only preſume upon, and promiſe to themſelves what is repugnant in nature to be performed; but alſo, are confident that they are able to conquer even at their pleaſure, and that by way of recreation, the moſt difficult paſſages of nature, without trouble or travail. *And of Magick* thus much; the name whereof we have vindicated from reproach, and ſeparated the true and noble kind from the baſe and counterfeit.

* INVENTARIUM OPUM HUMANARUM.

II. *Of this operative part of Nature there are two Appendices*, both of much importance. *The firſt is, that there be made an Inventary of the eſtate of Man*; in which there ſhould be taken and compendiouſly caſt up, the ſumm of all the wealth and fortunes of men (whether they ariſe from the fruits and revenues of Nature, or of Art) which are now extant, and whereof men are already poſſeſt, adding ſuch inventions, as is manifeſt have been in times paſt celebrated, but are now periſht. To this end and purpoſe, that he who addreſſeth himſelf to the ſearch of new Inventions, may not be arreſted in his inqueſt, nor waſte time and ſtudy in thoſe things which are already invented, and are now extant. *And this Inventary* will be more artificial, and more ſerviceable, if you add thoſe things which in popular conceit are reputed *impoſſible*; and together with them couple ſuch inventions, as are neareſt in degree to *impoſſibles*, and yet are extant; that the one may ſet an edge on mans enquiry, the other may in a ſort direct it: and that from theſe *Optatives*, and *Potentials*, mans *Actives* may be more readily conducted.

* CATALOGUS POLYCHRESTORUM.

§ *The ſecond is, that there be made a Calendar of thoſe experiments*, which are *Polychreſts*, things of a multifarious uſe; and moſt univerſal conſequence; and which conduce and direct to the *Invention* of other *experiments*. For example; the artificial experiment of *congelaciation of Water by Ice with black ſalt*, pertains to infinite purpoſes and eſſays; for this diſcloſeth the ſecret and abſtruſe

ſtruſe manner of Condenſation, than which nothing is more commodious for men. *As for fire*, that is a ready and known Agent for *Rarefaction*, but the myſtery of *Condenſation*, is not yet fully diſcovered: and it makes much for the abridgement of invention, if *Polychreſts* of this nature were collected into a particular Catalogue.

CHAP. VI.

Of the great Appendix of Natural Philoſophy, Speculative, as Operative, Mathematick knowledge; *and that it ought rather to be placed amongſt Appendices, than amongſt ſubſtantial Sciences.* § *The Partition of* Mathematicks into Pure and Mixt.

ARiſtotle ſaith well, *Phyſick and Mathematick ingender practical or mechanical knowledge:* Wherefore now we have handled, both the *ſpeculative* and *operative* part of the *knowledge of Nature*; order requires that we ſpeak of *Mathematick*, which is an auxiliary Science to to them both. *For*, in the received Philoſophy, *Mathematick is annext, as a third part, to Phyſick and Metaphyſick*; but it ſeems to us, who have undertaken to reexamine, and Till over again theſe things, (if we had deſigned this as a ſubſtantive and principal Science) more agreeable both in reſpect of the nature of the thing, and the light of order, to place it as a branch of *Metaphyſick*. For *Quantity*, which is the ſubject of *Mathematick Science*, applied to Matter, is the Doſe, as it were, of Nature, and productive of a number of effects in things natural; and therefore is to be reckoned in the number of *eſſential forms*. For the Power of *Figure and Number*, ſeemed to be of ſuch force amongſt the Ancient Philoſophers, that *Democritus* placed the ſeeds of the variety of things, principally, in the *Figures of Atoms*; and *Pythagoras* aſſerted, the Natures of things, to be conſtituted of *Numbers*. In the mean, this is true, that of Natural *Forms*, (as we underſtand forms) *Quantity* is of all moſt abſtracted and ſeparable from Matter: which was the reaſon why it hath been more painfully laboured, and exactly inquired by men, than any other *Form* whatſoever, which are all more immerſed in Matter. For being it is the nature of Man (certainly to the great prejudice of knowledge) to delight *in the open Fields of Generals*; rather than in the *Woods* and *Incloſures* of *Particulars*; there was nothing found more acceptable and delightful, than the *Mathematicks*; wherein that appetite of expatiating and meditating might be ſatisfied. *And* though all this be true, yet to us, who provide not only for truth and order, but likewiſe for the uſe and profit of men; it ſeemed at laſt better, to deſign *Mathematicks*; being they are of ſuch efficacy, both in *Phyſick*, and in *Mataphyſick*, and in *Mechanicks*, and in *Magick*, as the *Appendices* and Auxiliary Forces of them all: which in a ſort we are compelled to do for the wantonneſs and arrogancie of the *Mathematicians*, who could

Metaph. i & ix.

Laert. in Dem.

Iambl. de vita Pyth. l. i.

could be content, that *this Science*, might even command and overrule *Phyſick*. *For* it is come to paſs, by what fate I know not, that *Mathematick* and *Logick*, which ſhould carry themſelves as handmaids to *Phyſick*, boaſting their certainty above it, take upon them a command and Dominion. But we do not ſo much ſtand upon the rank and dignity of this Science, let us conſider the thing it ſelf.

§ *Mathematicks are either Pure or Mixt*; *to Pure Mathematicks*, thoſe Sciences are referred, which handle *Quantity* altogether abſtracted from Matter, and Phyſical Axioms. *They are* two, *Geometry*, and *Arithmetick*; *the one handling Quantity continued*, *the other diſſevered*. Which two Arts have indeed been inquired into, with ſubtilty and induſtry, but neither to the labours of *Euclid* in *Geometry*, hath there been any thing of any worth added by poſterity, in ſo many centuries of years ſince he flouriſht; nor hath the Doctrine of *Solids*, for the uſe and excellency of the knowledge, been laboured and advanced by Writers Ancient or Modern. And in *Arithmetick* there hath not been found out apt and ſufficient variety of compendious ways for *ſupputations*; eſpecially about *Progreſſions*; whereof there is great uſe in the Phyſicks. Nor is the *Algebra*, *or Art of Equation* well perfected; but that *Pythagorical* and *Myſtical Arithmetick*, which is begun to be revived out of *Proclus*, and ſome Remains of *Euclid*; is a ſpacious field of ſpeculation : *For ſuch is the nature of Man*, *that if it be not able to comprehend ſolids*, *it waſtes it ſelf in unprofitable niceties.*

§ *Mixt Mathematick*, hath for ſubject *Axioms*, and *portions of Phyſick*; and conſiders *Quantity*, as it is auxiliary to enlighten, demonſtrate, and actuate them. For many parts of Nature can never be with ſufficient ſubtilty comprehended, nor demonſtrated with ſufficient perſpicuity, nor accommodated to uſe with ſufficient dexterity and certainty, without the Aid and intervening of the *Mathematicks*. Of which ſort are *Perſpective*, *Muſick*, *Aſtronomy*, *Coſmography*, *Architecture*, *Ingenarie*, and divers others. But in *Mixt Mathematicks*, I can now report no entire portions *Deficient*; I rather make this prediction, that there will be more kinds of them invented by poſterity, if men be not wanting to themſelves. For as Phyſical knowledge daily grows up, and new Axioms of nature are diſcloſed, there will be a neceſſity of new Mathematick inventions, and ſo at laſt more *Mixt Mathematicks* will be contrived. *And now we have paſſed through the knowledge of Nature*, *and have noted the Deficients therein.* Wherein if we have departed from the Ancient and received opinons, and thereby have moved contradiction; *for our part*, *as we affect not to diſſent*, *ſo we purpoſe not to contend.* If it be *truth*,

Virg. Bucol. *Non Canimus ſurdis*, *reſpondent omnia ſylvæ*;

The voice of nature will cry it up, though the voice of man ſhould cry it down. And as *Alexander Borgia* was wont to ſay, of the Expedition of the *French* for *Naples*, *that they came with chalk in their*

Vid. Hiſt. Gal.

hands

hands to mark up their Lodgings, and not with weapons to fight; ſo we like better, that entry of truth, which comes peaceably, where the *Minds* of men, capable to lodge ſo great a gueſt, are ſigned, as it were, with *chalk*; *than that which comes with Pugnacity*; *and forceth it ſelf a way by contentions and controverſies.* Wherefore having finiſht two parts of Philoſophy, *concerning God, and concerning nature*; the third remains *concerning* Man.

THE

THE

Fourth Book

OF

FRANCIS L. VERULAM

VICOUNT S^t. *ALBAN*,

OF THE

Dignity and Advancement

OF

LEARNING.

To the KING.

CHAP. I.

I. The Partition *of the Knowledge of Man into the Philoſophy of Humanity; and Civil.* § The Partition of the Knowledge of *Humanity into the Knowledge touching the Body of Man; and into the Knowledge touching the Soul of Man.* II The Conſtitution *of a general Knowledge of the Nature, or of the State of man.* § The Diviſion *of the Knowledge of the State of Man, into the Knowledge of the Perſon of Man; and of the League of the Mind, and the body.* § The Diviſion *of the Knowledge of Mans Perſon, into the Knowledge of Mans Miſeries.* § *And of his Prerogatives.* III. The Diviſion *of the Knowledge of the League, into the Knowledge of Indications.* § *And of Impreſſions.* § The Aſſignment *of Phyſiognomy.* § *And of the Interpretation of Natural Dreams, to the Knowledges of Indications.*

IF any Man (*Excellent King*) ſhall aſſault, or wound me for any of thoſe *Precepts* I have delivered, or ſhall hereafter deliver (beſides that I ſhould be ſafe, being under the Protection of *Your Majeſty*) let him know, that he doth that which is againſt the Cuſtom and Law of Arms: For I am a Trumpeter only, I do not begin the fight; perchance one of thoſe of whom *Homer*, &c.

Hom. Il. 4. Καίρετε νήρυκες διὸς Ἄγγελοι, ἠδὲ καὶ ἀνδρῶν:

For these even between Mortal and enraged enemies past to and fro ever inviolated. Nor doth our Trumpet summon, and incourage men to tear and rend one another with contradictions; and in a civil rage to bear Arms, and wage War against themselves; but rather, a peace concluded between them, they may with joynt forces direct their strength against *Nature her self*; and take her high Towers, and dismantle her fortified Holds; and thus enlarge the Borders of mans Dominion, so far as Almighty God of his goodness shall permit.

Plat. in Alcib. 1. Cic. de LL. lib. 1. I. Now let us come to that Knowledge, whereunto the Ancient Oracle directeth us, which is *the knowledge of our selves:* which deserves the more accurate handling by how much it toucheth us more nearly. *This knowledge is to man the end and term of Knowledges; but of Nature her self, a portion only.* And generally let this be a rule, that all Divisions of Knowledges be so accepted and applied, *As may rather design forth and distinguish Sciences into Parts; than cut and pull them asunder into pieces; that so the continuance and entireness of Knowledges may ever be preserved.* For the contrary practice hath made particular Sciences to become barren, shallow, and erroneous; while they have not been nourisht, maintain'd and rectified from the common Fountain and Nursery. So we see *Cicero* the Orator complained of *Socrates*, and his School; *That he was the first that separated Philosophy and Rhetorick*; whereupon Rhetorick became a verbal, and an empty Art. And it is also evident, that the opinion of *Copernicus*, touching *the Rotation of the Earth* (which now is maintain'd) becaufe it is not repugnant to the *Phœnomena*, cannot be revinced by Astronomical Principles; yet by the Principles of Natural Philosophy, truly applied, it may. So we see also that the *Science of Medicine*, if it be destituted and forsaken of *Natural Philosophy*, it is not much better than *Emperical Practice.*

Sen. Epist. § 89.

Cicero de Orat.

§ *This being laid as a ground, let us proceed to the Knowledge of man.* This hath two parts: *For it either considereth man segregate, or distributively; or congregate, and in society: the one we call Philosophy of Humanity; the other Philosophy Civil.* The *Philosophy of Humanity, or Humane*, consisteth of the same Parts, whereof man himself consisteth; that is, of knowledges which respect the *Body*; and of knowledges which respect the *Mind.*

II. *But before* we pursue particular Distributions, let us constitute; *One general Knowledge of the Nature and State of Man:* For indeed it is very fit that this *Knowledge* be emancipate, and made a knowledge by it self. It is compos'd of those *Sympathies* and *Concordances* commune between the *Body* and the *Mind.*

§ *Again, this Knowledge of the Nature and State of man* may be distributed into two Parts; attributing to the one *the undivided Nature of man*; to the other *the Combination between the Mind and the Body:* The first of these we will call *the knowledge of the Person of man*; the second *the knowledge of the League.* And it is plain that all these several Branches of Knowledge, being they are common and commixt, could not be assigned to that first Division of Knowledge, conversant

about

about the *Body*; and of Knowledges conversant about the *Mind*.

§ *The Knowledge concerning the Person of man*, comprehends specially two things; namely the Contemplations of the *Miseries of Mankind*; and of the *Prerogatives, or Excellencies of the same*. But the *bewailing of mans miseries* hath been elegantly and copiously set forth by many in the writings, as well of Philosophers, as divines. And it is both a pleasant and a profitable Contemplation.

* *Triumphi Hominis, Sive De Summitatibus Naturæ Humanæ.*

§ As for that other touching *Mans Prerogatives*, it is a point may well be set down among the *Deficients*. *Pindar* when he would extol *Hiero*, speaks (as usually he doth) most elegantly, *That he cropt off the tops, or summities of all virtues*. For I suppose it would much conduce to the Magnanimity, and Honour of Man; if a Collection were made of the *Ultimies* (as the Schools speak) or *Summities* (as *Pindar*) *of Humane Nature*, principally out of the faithful reports of History: That as; *What is the last and highest pitch, to which mans Nature of it self hath ever reach'd in all the Perfections both of Body and Mind*. What a strange ability was that which is reported of *Cæsar*, *that he could dictate at once to five Secretaries*! So the Exercitations of the Ancient Rhetoricians, *Protagoras*; *Gorgias*; likewise of Philosophers; *Calisthenes*; *Possidonius*; *Carneades*; who were able to discourse *extempore* upon any Subject *Pro* and *Con*, with fluency and elegancy of expression, do much ennoble the Powers of mans wit and natural endowments. And that which *Cicero* reports of his Master *Archias* is little for use, but perchance great for Ostentation and Faculties; that he was able upon the sudden to alledge a great number of excellent verses pertinent to the purpose of such Discourses as were then in hand. It is a singular commendation to that faculty of the Mind, the *Memory*; that *Cyrus* or *Scipio* could call so many thousands of men by their Particular Names. But the Trophies of Moral virtues, are no less famous than those of intellectual virtues. What a great example of patience doth that common story of *Anaxarchus* present unto our thoughts, who put to the Rack and Torture, bit out his own tongue, the hoped Instrument of some Discovery, and spit it in the Tyrant's face? Nor is that inferiour for tolerance though much for the merit and Dignity, (which fell out in our time) of a certain Burgundian, who had committed a Murder upon the Person of the Prince of Orange; this slave being scourged with iron whips; and his flesh torn with burning Pincers, gave not so much as a groan; howbeit when a broken piece of the Scaffold fell by chance upon the head of one that stood by, the scorcht stigmatiz'd varlet laught, even in the midst of his torments, who a little before wept at the cutting off of his curled hair. In like manner the serenity and security of Mind hath appeared wonderful in many, even at the instant approaches of Death; as that of a Centurion recorded by *Tacitus*; who being commanded by the executioner to stretch forth his neck valiantly. *I would* (saith he) *thou wouldst strike as valiantly*. But *John Duke* of Saxonie when the commission was brought him, as he was playing at chess, wherein his death was commanded the next day, call'd to one that stood by, and smiling, said; *See, whether I have not the better hand of this Game; He* (pointing towards him with whom he played) *will boast when I am dead, that he was the fairer of the set*. And our *More*, Chancellour of England, when the day before he was to die, a Barber came unto him (sent

In Olymp.

Suet. In Iul. Plat. in Hip. in Arist. Quin. Inst. 3 Laert in vit. Philostr. in Ep. alii Pro Archia Poeta.

Xenop. Cyrop. 5. Quintil. Inst. XI. Laert.

Meteran. Hist. bel. L. XI

Annal. 15.

Hist. Germ.

for this end, leſt perchance the grave and reverend ſight of his long hair might move compaſſion in the People, and asked him whether it was his pleaſure to have his hair cut) he refuſed, and turning to the Barber; *The King* (ſaid he) *is at ſuit with me for my head, and untill that Controverſie be ended I mean to beſtow no coſt upon it.* And the ſame Perſon at the very point of Death, after he had laid his head upon the fatal Block raiſeth up himſelf a little again; and having a fair large Beard gently removed it, ſaying, *Yet I hope this hath not offended the King.* But not to inſiſt too long upon this point, it is evident what we mean, namely, that *the wonders of Humane Nature, and the ultimate Powers, and virtues as well of Mind as of Body, ſhould be collected into a Volume, which might ſerve as a Kalendar of Humane Triumphs.* For a work of this Nature, we approve the Purpoſe, and Deſigne of *Valerius Maximus*, and C. *Plinius*; but it could be wiſht they had us'd more choice and Diligence.

Vita. Mori.

III *As touching the knowledge of the league, or mutual Alliance between the Body and the Mind*; that may be diſtributed into two Parts. For as all *leagues and Amities* conſiſt of mutual intelligence, aud mutual offices; ſo this *league* of *Mind* and *Body*, is in like manner compriſed in theſe two circumſtances; that is, to deſcribe *How theſe two, namely, the Mind and the Body, diſcloſe one to the other; and how one worketh upon the other, by diſcovery or Indication*; and by *Impreſſion.* The former of theſe (namely a deſcription what diſcovery may be made of the Mind, from the habit of the Body, or of the Body from the Accidents of the Mind) hath begotten unto us two Arts, both of prediction; where-of the one is honoured with the Inquiry of *Ariſtotle*; and the other of *Hippocrates.* And although the modern times, have polluted theſe Arts with ſuperſtitious and Phantaſtical mixtures, yet being purged and reſtored to their true ſtate, they have both a ſolid ground in nature, and a profitable uſe in life.

Ariſt. Hip.

§ *The firſt is Phyſiognomy, which diſcovers the diſpoſitions of the mind, by the lineaments of the Body. The ſecond is the expoſition of Natural dreams, which diſcovereth the ſtate and Diſpoſition of the Body, from the Paſſions and Motions of the mind.* In the *Former* of theſe, I note a *Deficience: for Ariſtotle hath very ingeniouſly and diligently handled the Poſtures of the Body, while it is at Reſt; but not the Geſtures of the Body when it is in Motion; which are no leſs comprehenſible by Art, and of Greater uſe.* For the lineaments of the Body, do diſcloſe the Inclinations and Proclivities of the Mind in general; but the Motions and Geſtures of the Face and Parts, do not only ſo, but further declare the Acceſſes, and Seaſons, and Prognoſticks of the preſent diſpoſition, and of the will. For, to uſe your Majeſties moſt apt and elegant expreſſion, *The tongue ſpeaks to the ear, but the Geſture ſpeaks to the eye.* And therefore a number of old ſubtile and crafty Perſons, whoſe eyes do dwell upon the faces and faſhions of Men, do well know this obſervation; and can turn it to their own advantage, as being a great part of their ability and wiſdom, Neither indeed can it be denied, but that this is a great diſcovery of diſſimulation in an other, and a great direction, for the election of ſeaſons, and opportunities of approaching to perſons; which is not the meaneſt part of Civil Prudence. And let no man think, that ſuch dexterity may ſomewhat avail, in reſpect of ſome Particular perſons, but cannot be comprehended under rule: for we all laugh, and weep, and

Phyſiognomia Corporis In motu.

Iacobus. R.

and bluſh, and bend the brow much after the ſame manner; and ſo for moſt part it is in other more ſubtile motions. As for *Chiromancy*, it is a meer impoſture.

§ *And as touching the expoſition of Dreams*; it is a ſubject handled in ſome mens writings, but foild with many idle vanities; only thus much for the preſent I do Inſinuate, that this knowledge of *interpreting Dreams*, wants the ſupport of a ſolid Baſe; and that foundation is this, *where the ſame effect is wrought, by an inward cauſe, that uſeth to be wrought by an outward; that extern Act is transformed into a Dream.* The ſurcharge of the ſtomack from a groſs vapour, and from the poiſe of ſome outward weight, are alike; wherefore they that labour of the *Night-mare* do dream, that a weight is put upon them, with a great preparation of circumſtances. The fluctuation or penſility of the Bowels, from the agitation of the waves in the ſea, and from the wind gathered about the *Diaphragma*, are alike: therefore ſuch as are troubled with the Hypocondriack wind, do often dream of Navigations, and Agitations upon the waters. There are an infinite number of ſuch like inſtances.

§ The other branch of the *knowledge of the league* (which we have called *Impreſſion*) hath not as yet been collected into Art, but hath ſometimes intervened among other Treatiſes ſparſedly, and as in paſſage only. It hath the ſame Antiſtrophe with the former: for the conſideration is double; *either how, and how far the humours and temperament of the body, do alter or work upon the mind:* Or again, *How and how far, the Paſſions and Apprehenſions of the mind do alter or work upon the Body.* The former of theſe we ſee ſometimes handled in the Art of Phyſick; but the ſame hath by ſtrange ways inſinuated it ſelf into Religion. For the Phyſician preſcribes Remedies to cure the Maladies of the mind; as in the cures of Frenzies and Melancholy: they do alſo adminiſter Phyſick to exhilerate the Mind; to munite and ſtrengthen the heart, and ſo to increaſe the courage, to ſharpen and clarifie the wits, to corroborate the Memory, and the like. But Diets, and choice of Meats, and Drinks, and other obſervances touching the Body, in the ſect of the *Pythagoreans*; in the Hereſie of the *Manichees*, and in the law of *Mahomet* do exceed all meaſure. So likewiſe *the ordinances of the Ceremonial Law, interdicting the eating of the bloud; and the Fat:* and *diſtinguiſhing between beaſts clean and unclean*, ſo far as they are for meat, are many and ſtrict. Nay the Chriſtian faith it ſelf, though clear and ſincere from all clouds of ceremonies; yet retains the uſe of Faſtings; Abſtinences; and other obſervances, which tend to the maceration and humiliation of the Body; as things not meerly Figurative; but alſo Fruitful. The root and life of all ſuch preſcripts as theſe, (beſides the Ceremony it ſelf, and the practice of Canonical obedience,) conſiſts in this whereof we ſpeak, namely, *that there may be a mutual ſufferance and humiliation of the Soul with the Body.* And if any man of weaker judgement do conceive, that theſe impreſſions of the Body upon the Mind, do either queſtion the immortality, or derogate from the ſoveraignty of the ſoul over the Body; to an eaſie doubt, an eaſie anſwer is ſufficient. Let him take theſe inſtances; *either from an Infant in the Mothers wombe, which is compatible with the Accidents and Symptomes, of the mother, and yet ſeparable in its ſeaſon, from the Body of the mother:* Or from Monarchs, who though they have abſolute power, are ſometimes in-

Deut. 12.

clined

clined by the ſway of their Servants; yet without ſubjection of their Perſons or diminution of their Power.

§ *Now as for the reciprocal part, the operations of the Soul, and of the Effects and Paſſions thereof upon the Body*; that alſo hath found a place in Medicine. For all wiſe Phyſicians do ever conſider and handle, *Accidentia Animi*, as a Matter of great moment, for their Cures; and which are of great force to further or hinder all other Remedies. But there is another obſervation pertinent to this ſubject, which hath been very ſparingly inquired into, and nothing to the depth and dignity of the thing; that is, (ſetting aſide the affections) *how far the Imagination of the Mind, or a thought deeply fixt, and exalted as it were, into a belief, is of Power to alter the Body of the Imaginant?* For though it hath a manifeſt power to hurt, it follows not, that it hath the ſame degree of power to help: No more indeed, than if a man ſhould conclude, that becauſe there be peſtilent Airs able ſuddenly to kill a man in health; therefore there ſhould be Soveraign Airs, able ſuddenly to cure a man in ſickneſs. *This Inquiſition* would certainly be of excellent uſe, but as *Socrates* ſaid, it *needs a Delian Diver*, being covered with darkneſs and obſcurity. *Again*, of all theſe Knowledges, *de Fœdere*; or of the *Concordances between the mind and the body*, there is no part more neceſſary than the diſquiſition of the *Seats* and *Domicils*, which the ſeveral faculties of the mind do take and occupate in the Body, and the Organs thereof. Which kind of knowledge hath not wanted Sectators, but what is found in many ſuch Writers is either controverted, or ſlightly inquired; and would be ſearcht into with more diligence and perſpicacity. For the opinion introduced by *Plato* placing the underſtanding in the brain, as in a high Tower; *Animoſity* (which he unfitly calleth *Anger*, being it is nearer to Tumor and Pride) in the *Heart*; *Concupiſcence* and *Senſuality* in the *Liver*, deſerves not altogether to be deſpiſed; nor yet too haſtily embrac'd. So the placing of the *Intellectual Faculties*; *Imagination*, *Reaſon*, *Memory*; according to the ventricles of the Brain, is not without error. Thus have we explicated the Knowledge touching the *individed nature of man*, as alſo touching the *League of the Body and the Mind.*

Laert. in V.

Plat. in Timæo. Ariſt. de Gen. Anim. 4. Gal. de plac. Plat.

CHAP. II.

I. The Partition *of the Knowledge reſpecting the Body of Man into Art Medicinal.* §. *Coſmetick.* §. *Athletick.* §. *And Voluptuary.* II. The Partition *of Medicine, into three duties.* §. *Conſervation of Health.* III. *Cure of Diſeaſes.* IV. *And Prolongation of Life:* And that the laſt part, *Prolongation of Life*, ſhould be ſeparate from the other two.

THE *Knowledge that concerns mans body*, is divided, as the *Good* of *Mans Body* is divided, unto which it is referr'd. *The Good of Mans Body*, is of four kinds; *Health*; *Form*, or *Beauty*; *Strength*; *Pleaſure.* Wherefore there are ſo many *Sciences*; *Medicine*, or the *Art*

of

of Cure; *Cosmetick, or the Art of Decoration*; *Athletick, or the Art of Activity*; *and Art Voluptuary*, which *Tacitus* calls *Eruditus Luxus.*

§ *Medicine* is a noble Art, and according to the Poets descended of a most generous race; for they have brought in *Apollo*, as the chief God of Medicine, to whom they have assigned *Æsculapius* for his son; a God too, and a Professor of *Physick: Because in things natural the Sun is the Author, and Fountain of Life*; *the Physician the Conserver of Nature*; *and as it were a second spring of Life.* But the greatest glory to *Physick* is from the works of our Saviour, who was a Physician both of Soul and Body. And as he made the Soul the peculiar object of his heavenly Doctrine; so he design'd the Body the proper subject of his miracles. For we never read of any miracles done by him respecting Honour or Wealth, (besides that one when Tribute was to be given to *Cæsar*) but only respecting the Body of man; or to preserve, or to sustain, or to cure it. Homer. Hym. Paus. an. alii.

§ *The Subject of Medicine* (namely *mans Body*) is, of all other things which nature hath brought forth, most capable of Remedy; but then that Remedy is most capable of Error: For the same subtility, and variety of the subject, as it affords great possibility of Cure, so it gives great facility to error. Wherefore as that Art (such as now it is) may well be reckon'd amongst Arts conjectural; so the enquiry thereof may be placed in the number of the most difficult, and axactest Arts. Neither yet are we so senseless, as to imagine with *Paracelsus*, and the Alchymists; *That there are to be found in mans Body certain Correspondences, and Parallels to all the variety of specifick Natures in the world* (as *Stars, Minerals*, and the rest) as they foolishly fancy and Mythologize; straining, but very impertinently, that emblem of the Ancients, *That man was Microcosmus, an abstract, or model of the whole world*, to countenance their fabulous, and fictious invention. Yet notwithstanding this is an evident truth, (which we were about to say) *That amongst all Bodies Natural, there is not found any so multipliciously compounded as the Body of man.* For we see Herbs, and Plants, are nourished by earth and water; Beasts by Herbs and Fruits: But man by the flesh of living Creatures; as Beasts, Birds, Fish; and also of Herbs, Grains, Fruits, Juice, and divers Liquors; not without manifold commixtures, seasoning, and Preparation of these Bodies before they come to be mans meat, and aliment. Add hereunto, that Beasts have a more simple order of life, and less change of affections to work upon their Bodies, and they commonly working one way; whereas man in his Mansions, Exercises, Passions, Sleep, and Vigilances is subject to infinite vicissitudes of changes. So that it is most evident that of all other natural substances, the Body of man is the most fermentated, compounded, and incorporated Mass. The soul, on the other side, is the simplest of substances, as it is well express; Paramirii lib. 4. Rob. Flud. passim.

——— *Purumq; relinquit*
Æthereum sensum, atq; Aurai simplicis ignem. Virg. Æn. 6.

So that it is no marvail, though the soul so placed, enjoy no rest; according to that Principle, *Motus rerum extrà locum est rapidus, placidus in loco:* But to the purpose, this various and subtile composition and fabrick of mans body hath made it, as a curious and exquisite instrument, Arist. Phys. & de cæl.

ment, eaſie to be diſtemper'd; therefore the Poets did well *to conjoyn*
Pauſan.in Eliacis. *Muſick and Medicine in* Apollo; *becauſe the Genius of both theſe Arts is*
Ov.Met.1. *almoſt the ſame*; and the office of a Phyſician conſiſteth meerly in this, to know how to tune, and finger this Lyre of mans body; that the Harmony may not become diſcordant and harſh. So then this inconſtancy, and variety of the ſubject, hath made the Art more conjectural: And the Art being ſo conjectural had given more large ſcope, not only to error, but even to impoſture. *For almoſt all other Arts and Sciences are judg'd by their power and operation; and not by their ſucceſs and work. The Lawyer is judg'd by the virtue of his pleading, and not by the iſſue of the Cauſe; the Maſter in the Ship approves his Art, by the directing his courſe aright, and not by the fortune of the voyage: But the Phyſician, and perhaps the Politick hardly have any porper particular Acts, whereby they may make a clear demonſtration of their Art and abilities; but bear away honour or diſgrace principally from the event which is ever an unequal judicature.* For who can tell, if a Patient dye or recover; or if a State be preſerved or ruin'd; whether it be by Art or Accident? Therefore it often falls out, that the Impoſtor bears away the Prize, Virtue the Cenſure. Nay, the weakneſs and credulity of men is ſuch, *As they often prefer a Mountebank, or Witch, before a Learn'd Phyſician.* Therefore the Poets were clear and quick-ſighted, when they made *Æſculapius* and *Circe*, Brother and Siſter; both children of the Sun, as in the Verſes; of *Æſculapius* the Suns Son,

Virg. Æn. 7. *Ille repertorem Medicinæ talis, & Artis,*
Fulmine Phœbigenam Stygeas detruſit ad undas;

And likewiſe of *Circe* the Suns Daughter,

Ibid. *Dives inacceſſos ubi ſolis filia lucos*
Aſſiduo reſonat cantu: tectiſq; ſuperbis
Urit odoratam nocturna in lumina Cedrum.

For in all times in the reputation and opinion of the Multitude, Witches, and old Women, and Impoſtors have been rival Competitors with Phyſicians; and have even contended with them for the fame of Cures. And what I pray you follows? Even this, that Phyſitians ſay to themſelves, as *Solomon* expreſſeth it upon a higher occaſion, *If it befals*
Eccleſ.2. *to me, as it befals to the fool, why ſhould I labour to be more wiſe?* And therefore I cannot much blame Phyſicians, if they uſe commonly to intend ſome other Art, or Practice, which they fancy more than their Profeſſion: For you ſhall have of them Poets, Antiquaries, Criticks, Rhetoricians, Politicks, Divines, and in theſe Arts better ſeen, than in
Agrip. de van.ſcien. their own profeſſion. Nor doth this come to paſs, as I ſuppoſe, becauſe (as a certain Declaimor againſt Sciences, objects againſt Phyſicians) they have ever Converſant before their eyes ſuch loathſome and ſad ſpectacles, that they muſt needs retire their minds from theſe objects, to ſome other contemplations; for as they are men, *Nihil Humani à ſe alienum putent*, but for this reaſon, whereof we now ſpeak; namely, that they find, *that Mediocrity, and excellency in their Art, maketh no difference in profit or reputation towards their Perſons or Fortunes.*

tunes. For the vexations of ſickneſs; the ſweetneſs of life; the flattery hope; the commendation of friends; maketh men to depend upon Phyſicians with all their defects: But if a man ſeriouſly weigh the matter, theſe things rather redound to the imputation of Phyſicians, than their excuſation: who ſhould not for theſe prejudices caſt away hope; but encreaſe their pains and diligence. For whoſoever pleaſeth to excite and awake his obſervation, and a little look about him, ſhall eaſily deprehend even from common and familiar examples, what a command and ſoveraignty the ſubtilty and ſharpneſs of the underſtanding hath over the variety either of matter, or of the form of things. *Nothing is more variable than mens faces* and countenances; yet the memory retains the infinite diſtinctions of them: Nay, a Painter with a few ſhells of Colours; the benefit of his eye; the habit of his imagination; and the ſteadineſs of his hand; can imitate and draw with his pencil all faces that are, have been, or ever ſhall be; if they were brought before him: *Nothing more variable than mans voice*; yet we can eaſily diſcern their differences in every particular perſon; nay, you ſhall have a Buffoon, or a Pantomimus will render and expreſs to the life, as many as he pleaſeth. *Nothing more variable than articulate ſounds of words*, yet men have found away to reduce them to a few Letters of the Alphabet. And this is moſt certain, *that it is not the inſufficiency, or incapacity of mans mind; but rather the remote ſtanding, or placing of the object that breeds theſe Mazes, and Incomprehenſions.* For as the ſenſe a far off is full of miſtaking; but within due diſtance errs not much; ſo it is in the underſtanding. *For men uſe commonly to take a proſpect of Nature, as from ſome high Turret, and to view her a far off; and are too much taken up with generalities, whereas if they would vouchſafe to deſcend and approach nearer to particulars; and more exactly and conſiderately look into things themſelves; there might be made a more true and profitable diſcovery and comprehenſion.* Now the remedy of this error, *is not alone this, to quicken or ſtrengthen the Organ; but withal to go nearer to the object:* And therefore there is no doubt but if Phyſicians, letting Generalities go for a while, and ſuſpending their aſſent thereto, would make their approaches to Nature; they might become Maſters of that Art, whereof the Poet ſpeaks,

Et quoniam variant morbi, variabimus Artes;
Mille mali ſpecies, mille ſalutis erunt. Ovid R. A. l. 2.

Which they ought the rather to endeavour becauſe the Philoſophers themſelves, upon the which Phyſicians, whether they be Methodiſts, or Chymiſts, do relye (*for Medicine not grounded upon Philoſophy is a weak thing*) are indeed very ſlight and ſuperficial. *Wherefore if* too wide Generalities, though true, have this defect, that they do not well bring men home to Action; certainly there is greater danger in thoſe Generals, which are in themſelves falſe, and inſtead of directing to truth, miſlead the mind into the by-paths of Error.

§ *Medicine therefore* (as we have ſeen) hitherto hath been ſuch, as hath been more profeſſed, than laboured; and yet more laboured than advanced; ſeeing the pains beſtowed thereon, hath been rather in cir-

cle, than in progreſſion. *For I find much Iteration but ſmall Addition in Writers of that Faculty.*

II. We will divide it into three Parts, which we will call the three Duties thereof: *The firſt is Conſervation of Health, ſecond the Cure of Diſeaſes; the third Prolongation of Life.*

§ But for this laſt duty, Phyſicians ſeem not to have acknowledg'd it as any principal part of their Art; but have (ignorantly enough) mingled and confounded it as one and the ſame with the other two. *For* they ſuppoſe, that if Diſeaſes be repelled before they ſeize upon the body; or be cured after they have ſurpriz'd the body; that *Prolongation of Life* muſt naturally follow. Which though it be ſo, without all queſtion, yet they do not ſo exactly conſider; that theſe two offices of *Conſervation* and *Curation*, only pertain to Diſeaſes; and to ſuch *Prolongation of Life* alone, which is abbreviated and intercepted by Diſeaſes: But *to draw out the thread of Life*, and to prorogue Death for a ſeaſon, which ſilently ſteals upon us by natural reſolution, and the Atrophy of Age; is an argument, that no Phyſician hath handled it according to the Merit of the ſubject. *Neither let that ſcruple trouble the minds of Men, as if this thing committed to the diſpenſation of Fate, and the divine providince, were now by us firſt repealed and commended to the charge and office of Art.* For without doubt Providence doth diſpoſe and determine all kind of deaths whatſoever, whether they come of violence, or from Diſeaſes, or from the courſe of Age; and yet doth not therefore exclude Preventions and Remedies: For Art and humane induſtry do not command and rule Fate, and Nature; but ſerve and adminiſter unto them. *But* of this part we ſhall ſpeak anon: Thus much in the mean time by way of anticipation, leſt any ſhould unskilfully confound this *third office* of medicine, with the two former, which uſually hitherto hath been done.

Fatum, Stoic. horr. Dogma.

§ *As for the duty of preſervation of Health*, the firſt duty of the three, many have written thereof, as in other points very impertinently, ſo (in our judgment) in this particular; in attributing too much to the quality of meats, and too little to the quantity thereof: and in the quantity it ſelf, they have diſcourſed like Moral Philoſophers, exceſſively praiſing Mediocrity; whereas both *faſting* changed to cuſtome, and *full feeding*, to which a man hath inured himſelf, are better *regiments of health*, than thoſe *Mediocrities* which commonly enervate Nature, and make her ſlothful, and impatient, if need ſhould be, of any extremity, exceſs, or indigence. And for the divers kinds of *Exerciſe*, which much conduce to the *conſervation of health*, none of that profeſſion hath well diſtinguiſht or obſerved, whereas there is hardly found any diſpoſition to a diſeaſe, which may not be corrected by ſome kind of exerciſe proper to ſuch an infirmity: As bowling is good againſt the weakneſs of the Reins; ſhooting againſt the obſtruction of the Lungs; walking and upright deport of the Body, againſt the Crudities of the ſtomach; and for other diſeaſes other exercitations. But ſeeing this part touching *the conſervation of health* hath been in every point after a ſort handled, it is not our purpoſe to purſue leſſer deficiencies.

III. *As concerning the cures of Diſeaſes*; that is a Part of Medicine, whereon much labour hath been beſtowed, but with ſmall profit. It comprehendeth in it the *knowledge of Diſeaſes*, to which mans body is

ſubject

subject, together with the *Causes*, *Symptomes*, and *Cures* thereof. In this second Duty of Medicine, many things are *deficient*. of these we will propound a few, which are more remarkable, which to enumerate without precise order or Method, we suppose sufficient.

* NARRATIONES MEDICINALES.

§ *The first is the discontinuance*, of that profitable and accurate diligence of *Hippocrates*, whose custom was to set down a *Narrative* of the special cases of his Patients, what the Medicament, what the event. Therefore having so proper and notable a precedent from him, who was accounted the Father of the Art, we shall not need to alleage any example forreign, fetcht from other Arts; as from the wisdom of the Lawyers, with whom nothing is more usual, than to set down and enter more notable cases, and new dicisions, whereby they may the better furnish and direct themselves for the definition of future cases. *Wherefore I find this continuation of Medicinal Reports deficient*, specially digested into one entire body, with diligence and judgement, which yet I understand not to be made so ample, as to extend to every common case that daily falls out (for that were an infinite work, and to small purpose) nor yet so reserved and contracted as to admit none, but Prodigies and wonders, as many have done: for many things are new in the *manner* and circumstances of the thing, which are not *new* in the *kind*; and he that shall give his mind to observe, shall find many things even in matters vulgar worthy observation.

* ANATOMIA COMPARATA.

§ So in *Disquisitions Anatomical*, the manner is, that those parts which pertain in general to Mans body, are most diligently enquired and observed even to a curiosity, and that in every least filet: *but as touching the variety which is found in divers bodies, there the diligence of Physicians fails.* And therefore I grant that *simple Anatomy* hath been most clearly handled; *Comparative Anatomy, I define to be deficient.* For men have made a good enquiry into all the parts, and into their consistencies, figures, and collocations: but the divers figure, condition, and posture of those parts in divers men, they have not so well observed. The reason of this omission I suppose is no other than this, that the first inquiry may be satisfied in the view of one or two Anatomies; but the latter, being *Comparative* and Casual, must arise from the attentive and exact observation of many *Dissections*: and the first is a matter, wherein learned Professors in their Lectures, and the press of spectators standing about them, may vaunt themselves; but the second kind of *Anatomy*, is a severe knowledge, which must be acquired by a retired speculation, and a long experience. Nevertheless, there is no doubt but that the Figure and Structure of the inward parts is very little inferiour, for variety and lineaments, to the outward members; and that Hearts and Livers, and Ventricles are as different in men, as are either their Foreheads, or Noses, or Ears.

§ *And in these differences of inward parts*, there are often found the *Causes continent* of many Diseases; which Physicians not observing, do sometime accuse the Humours which are not delinquent, the fault being in the very Mechanick Frame of some part. In the cure of which Diseases, to apply *Alterative Medicines*, is to no purpose (because the part peccant is incapable of such alteration,) but the matter must be mended, and accommodated, or palliated by a prescript Diet and familiar Medicines. So likewise to *Comparative Anatomy* appertain ac-

curate obſervations, as well of all kind of humours, as of the footſteps and impreſſions of diſeaſes in divers bodies diſſected: for the Humours in Anatomies are commonly paſt by, as if they were ſuperfluous Purgaments and Excrements; whereas it is a point very uſeful and neceſſary, to note of what nature, and of how various kinds there be of different humours (not relying herein too much upon the received diviſions,) which ſometimes may be found in the body of Man; and in what Cavities and Receptacles, every humour uſeth for moſt part to lodge and neſtle, and with what advantage or prejudice, and the like. In like manner the *Footſteps* and *Impreſſions* of *Diſeaſes*, and the leſions and devaſtations of the inward parts by them, are to be obſerved with diligence in divers *Anatomies*; as impoſthumes, ulcerations, ſolutions of continuity, putrefactions, corroſions, conſumptions, luxations, diſlocations, obſtructions, repletions, tumors; together with all perternatural excreſcencies, found in mans body (as ſtones, carnoſities, wens, worms, and the like;) I ſay all theſe, and ſuch other, ſhould be with great diligence inquired, and digeſted by that *Comparative Anatomy*, whereof we ſpeak, and the experiments of many Phyſicians collected and collated together. *But this variety of Accidents*, is by Anatomiſts, either handled perfunctorily, or elſe paſt over in ſilence.

§ *Touching that other defect in Anatomy, (namely, that it hath not been uſed to be practiſed upon living bodies,)* to what end ſhould we ſpeak of it? for this is an odious and an inhumane experiment, and by *Celſus* juſtly condemned: yet notwithſtanding, that obſervation of the Ancients is true, That many Pores, Paſſages and Pertuſions, which are more ſubtile than the reſt, appear not in *Anatomical diſſections*, becauſe they are ſhut and latent in Dead *Bodies*; whereas they are open and manifeſt in *Live*. Wherefore to conſult both for uſe and humanity, this *Anatomia vivorum*, is not altogether to be relinquiſht, or referred (as *Celſus* did) to the caſual inſpections of Surgions, ſeeing this may well be performed, being diverted upon the *Diſſection of Beaſts alive*, which, notwithſtanding the diſſimilitude of their parts with mans, may ſufficiently ſatisfie this enquiry, being done with judgement.

De Re Medica.

* DE CURATIONE MORBORUM HABITORUM PRO INSANABILIBUS.

§ *Likewiſe in their inquiry of Diſeaſes*, they find many *Diſeaſes which they deeem and judge to be incurable*; ſome, from the firſt acceſs of the Diſeaſe, others, after ſuch a certain period: ſo that the Proſcriptions of L. *Scylla*, and the *Triumvirs*, were nothing to the *Proſcriptions of Phyſicians*, by which, by their moſt unjuſt Edicts; they deliver over ſo many men to death; whereof numbers do eſcape with leſs difficulty, than they did in the Roman Proſcriptions. Therefore I will not doubt to ſet down among *Deficients a work of the cures of Diſeaſes held incurable*; that ſo ſome excellent Generous Profeſſors in that faculty, may be awakt and ſtirred up, to ſet to this work (ſo far as the latent operations of Nature, by mans induſtry, may be diſcloſed) ſeeing this very ſentence of *Pronouncing Diſeaſes to be incurable*, enacts a Law, as it were, for ſloath and negligence, and redeems ignorance from Diſcredit and Infamy.

* DE EUTHANASIA EXTERIORE.

§ *Nay farther, to inſiſt a little upon this Point, I eſteem it the office of a Phyſician, not only to reſtore health, but to mitigate dolours, and torments of Diſeaſes*; and not only when ſuch mitigation of pain as of a dangerous

dangerous ſymptome, may make and conduce to recovery; but even when all hope of recovery being gone, it may ſerve to make a fair and eaſie paſſage out of life. For it is no ſmall felicity, which *Auguſtus Cæſar was wont to wiſh to himſelf, that ſame Euthanaſia*; which was alſo noted in the Death of *Antonius Pius*, who ſeemed not ſo much to dye, as to be caſt into a ſweet and deep ſleep. And it is written of *Epicurus* that he procured this ſame eaſie departure unto himſelf; for after his diſeaſe was judged deſperate, he drowned his ſtomach and ſenſes with a large draught, and ingurgitation of wine; whereupon the Epigramm was made ——*hinc Stygias ebrius hauſit aquas*, *He took away by theſe draughts of wine, the bitter taſt of the Stygian water.* But in our times Phyſicians make a kind of ſcruple and nicety of it, to ſtay with a patient after the diſeaſe is paſt hope of cure; whereas in my judgment, if they would not be wanting to their profeſſion, and to humanity it ſelf, they ought both to enquire the skill, and to give the attendance, *for the facilitating and aſſwaging of the Pains and Agonies of Death at their departure.* And this part, the enquiry *de Euthanaſia Exteriori*, (which we ſo call to diſtinguiſh it from that *Euthanaſia*, or *ſweet-calm Dying*, procured by a due preparation of the ſoul) we refer to the number of *Deficients.*

Sueton. in Aug.

Laert. in Epicuro.

§ *So in the Cures of Diſeaſes*, I find generally this *Deficience*; that the Phyſicians of the time, though they do not impertinently purſue the general intentions and ſcope of Cures; yet for particular Receipts, which by a kind of propriety reſpect the cures of ſpecifical diſeaſes; either they do not well know them, or they do not religiouſly obſerve them. For the Phyſicians have fruſtrated and taken away the fruit of Traditions, and approved experience, by their *Magiſtralities*; in adding and taking out, and changing ingredients of Receipts at their pleaſure; and almoſt after the manner of Apothecaries, putting in *Quid pro Quo*; comman ding ſo preſumptuouſly over Medicine, as the Medicine can no longer command the diſeaſe. For except *Treacle*, and *Mithridatum*, and of late, *Dioſcordium*, and the confection of *Alkermes*, and a few more Medicines; they commonly tie themſelves to no receipts ſeverely and ſtrictly. For the confections of ſale, which are in the ſhops, they are in readineſs rather for general purpoſes, than accommodate and proper for particular cures; for they do not exactly refer to any diſeaſe in ſpecial; but generally to the opening of obſtructions, comforting concoction, altering Diſtemperatures. And this is the cauſe why *Empericks* and *Old women* are more happy many times in their Cures, than Learned Phyſicians; becauſe they are faithful, and ſcrupulous in keeping themſelves to the confection and compoſition of approved *Medicines. I remember that a Phyſician* with us here in England, famous for practice, in religion half Jew, and almoſt an Arabian for his courſe of ſtudy, wont to ſay, *your European Phyſicians are indeed Learned men, but they know not the Particular Cures of Diſeaſes.* And the ſame perſon uſed to jeſt, but unreverently, ſaying, *That our Phyſicians were like Biſhops, they had the Keys of binding and looſing, and nothing elſe.* But to ſpeak the truth in earneſt; in our opinion it would be a matter of good conſequence, if ſome Phyſicians of Note for Learning and Practice, would compile *a work of Probations, and experimented Medicines for the cure of Particular Diſeaſes.* For that any man, induced by ſome ſpecious rea-

* DE MEDICINIS AVTHENTICIS.

ſon

ſon, ſhould be of opinion, that it is the part of a learned Phyſician (reſpecting the complections of Patients, their Age, the ſeaſon of the year, Cuſtomes and the like, rather to accommodate his Medicines as occaſions ſuggeſt, than to inſiſt upon ſome certain Preſcripts, is a deceivable aſſertion, and which attributes too little to experience, too much to judgment. *Certainly* as in the ſtate of *Rome* they were the men moſt uſeful, and of the beſt compoſition, which either being Conſuls favoured the People, or being Tribunes inclined to the Senate: So in the matter we now handle, they be the beſt of Phyſicians, which either in their great Learning, do much value the Traditions of Experience; or being famous for Practice, deſpiſe not Methods and Generalities of Art. *As for qualifications* of Medicines (if at any time that be expedient) they are rather to be practis'd upon the Differents of Phyſick, than incorporated into the Receipt, wherein nothing ſhould be innovated without apparent neceſſity. *Wherefore this Part which handleth Authentick and Poſitive Medicines*, we report as *Deficient:* but it is a matter not to be attempted or undertaken without a ſharp and piercing judgment; and as it were, in a Synod of ſelect Phyſicians.

* IMITATIO TERMARVM NATURALIUM.

§ Alſo in the *Preparations of Medicines* I do find it ſtrange (ſpecially conſidering how *Mineral Medicines* have been ſo extolled, and celebrated by Chymiſts; and that they are ſafer for the outward than inward Parts) *that no man hitherto hath endeavoured by Art to imitate Natural Baths, and Medicinable Fountains*; and yet it is confeſſed that *thoſe Baths and Fountains* receive their virtues from mineral veins through which they paſs: and for manifeſt proof hereof mans induſtry knows well how to diſcern and diſtinguiſh from what kind of Minerals ſuch waters receive their tinctures; as whether from Sulphur; Vitriol; Steel, or the like: *which natural tincture of waters*, if it may be reduced to compoſitions of Art, it would be in mans power, both to make more kinds of them, as occaſion required; and to command, at pleaſure, the temperament thereof. *Therefore this Part of the imitation of Nature in Artificial Baths* (a thing without queſtion both profitable and eaſie to be done) we take to be *Deficient.*

* FINIS MEDICINALE.

§ *But leſt I ſhould purſue Particulars more preciſely*, than is agreeable to our intention, or to the proportion of this Treatiſe; I will cloſe and conclude *this Part* with a note of one *Deficience* more, which ſeems to us to be of great conſequence; which is, *that the Preſcripts in uſe are too compendious to effect any notable or difficult cure.* For in our judgment it is a more vain and flattering, than true opinion, to think that any *Medicine* can be ſo ſovereign, or ſo happy, as that the ſimple uſe thereof ſhould be of force ſufficient for ſome great cure. It were a ſtrange ſpeech which ſpoken, or ſpoken oft, ſhould reclaim a man from a vice deeply rooted and inveterate, certainly it is far otherwiſe: *But it is order, Purſuit, Sequence, Artificial interchange, that are potent and mighty in nature:* Which although they require more exact judgment in preſcribing; and more preciſe obedience in obſerving, yet this is amply recompenced in the greatneſs of effects. And although a man would think, by the daily diligence of Phyſicians, their Viſitations, Seſſions, and Preſcriptions, which they perform to the ſick; that they did painfully purſue the Cure; and go on in a certain courſe: Yet let a man exactly look into their preſcripts, and miniſtrations, he ſhall find

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many of them full of wavering, inconſtancy, and every days deviſes; and ſuch as came into their minds without any certain, or adviſed courſe of Cure. *For they ſhould even from the beginning, after they have made a full and perfect diſcovery of the diſeaſe, meditate and reſolve upon an orderly ſequence of Cure; and not without important reaſons depart therefrom.* And let Phyſicians know for certain, that (for example) three perchance, or four receipts, are rightly preſcribed for the Cure of ſome great diſeaſe; which taken *in due order, and in due ſpaces of time perform the Cure; which if they were taken ſingle, or by themſelves alone; or if the Courſe were inverted, or the entervals of time not obſerved, would be hurtful.* Nor is it yet our meaning that every ſcrupulous and ſuperſtitious way of Cure in eſtimation ſhould be the beſt; no more than that every ſtreight way is the way to Heaven, but that the way ſhould be right as well as ſtreight and difficult. *And this* Part which we call *Filum Medicinale* we ſet down as *Deficient.* So theſe are the Parts which in the *Knowledge of Medicine*, touching the cure of Diſeaſes, are *deſiderate*, ſave that there remains yet one part more of more uſe than all the other, which is here wanting, *A true and Active natural Philoſophy, upon which the ſcience of Medicine ſhould be built:* but that belongs not to this Treatiſe.

IV. *The third part of Medicine* we have ſet down to be that of the *Prolongation of Life*, which is a part new and *Deficient*, and the moſt noble of all: For if any ſuch thing may be found out, Medicine ſhall not be practis'd only in the impurities of Cures, nor ſhall Phyſicians be honour'd only for Neceſſity, but for a gift, the greateſt of earthly Donations that could be confer'd on mortality, whereof men, next under God, may be the Diſpenſers and Adminiſtrators. *For although the world to a Chriſtian man, travelling to the land of Promiſe, be as it were a wilderneſs, yet that our ſhooes and veſtments (this is our Body, which is as a coverture to the ſoul,) be leſs worn away while we ſojourn in this wilderneſs, is to be eſteemed a gift coming from the divine goodneſs.* Now becauſe this is one of the choiceſt parts of Phyſick, and that we have ſet it down amongſt *Deficients*, we will after our accuſtomed manner give ſome Admonitions, Indications, and Precepts thereof. DE PROLONGANDO CURRICULO VITÆ.

§ *Firſt we advertiſe*, that of Writers in this Argument there is none extant that hath found out any thing of worth, that I may not ſay, any thing ſound touching this ſubject. *Indeed Ariſtotle* hath left unto poſterity a ſmall brief Commentary of this matter; wherein there is ſome acuteneſs, *which he would have to be all can be ſaid, as his manner is:* But the mote recent Writers have written ſo idly, and ſuperſtitiouſly upon the point, that the Argument it ſelf, through their vanity, is reputed vain and ſenſleſs. De longitud. & Brevit.

§ *Secondly, we advertiſe*, that the intentions of Phyſicians touching this Argument are nothing worth: and that they rather lead men away from the point, than direct them unto it. For they diſcourſe *that Death is a deſtitution of Heat and Moiſture, and therefore natural heat ſhould be comforted and radical moiſture cheriſht*; as if it were a matter to be effected by Broaths, or Lettuces, and Mallows, or * Jujubs, or fine Wafer-cakes, or elſe with hot ſpices, generous wine, or the ſpirits of wine, or chymical oyls; all which do rather hurt, than help. * Arabian Plums.

§ *Thirdly*, we admoniſh men that they ceaſe to triſle, and that they be

be not ſo credulous as to think that ſuch a great work as this is, *to retard and turn back the courſe of Nature*, may be brought to perfection by a morning draught, or the uſe of ſome precious Receipt; no not with *Aurum Potabile*, or the ſubſtances of Pearls, or ſuch like toys; but that they take it for a grounded truth, that the *Prolongation of Life*, is a great work, and which conſiſts in many kinds of Receipts, and of an orderly courſe and connexion of them: And let no man be ſo ſtupid as to believe, *that what never yet was done, can be now effected, but by means yet never attempted.*

Fourthly, we admoniſh men, that they rightly obſerve and diſtinguiſh touching thoſe Receipts which conduce to a *healthful life*, and thoſe which confer to a *long life*. For there are many things which exhilarate the ſpirits, ſtrengthen the active powers of nature, repel diſeaſes, which yet ſubduct from the ſum of life, and without ſickneſs accelerate aged *Atrophie*. And there are other Receipts which conduce to the *Prolongation of life*, and the *retardation of the Atrophie of old-age*; but yet are not us'd without hazard of health: So that they who uſe theſe remedies for the *prorogation of life*, muſt likewiſe provide againſt ſuch inconveniences as upon their uſage may unexpectedly fall out. And thus much by way of Admonition.

§ *As for Indications*, the image, or Idea we have conceiv'd in our mind hereof, is this: Things are conſerv'd and continued two ways; either in their own Identity, or by *Reparation*. *In their proper Identity*, as a Fly or an Ant in *Amber*; a Flower, an Apple or Wood in Conſervatories of Snow; a dead corps in Balſam. By *Reparation*, as in Flame, and Mechanicks. He that goes about the work of *Prolongation of Life*, muſt put in practice both theſe kinds, (for diſunited, their ſtrength is weakned) and *Mans body* muſt be *conſerv'd* after the ſame manner *inanimate Bodies* are conſerved: and again, as *Flame* is conſerved; and laſtly, even as *Mechanicks* are conſerved. *Wherefore there are three intentions for the Prolongation of Life; the Retardation of Conſumption; the Integrity of the Reparation; and the Renovation of that which begun to decay and grow old. Conſumption* is caus'd by two *Depredations*, *Depredation* of *innate Spirit*; and *Depredation* of *ambient Air*. The reſiſtence of both is two-fold, either when the *Agents* (that is, the ſucc and moiſtures of the Body) become leſs *Predatory*; or the *Patients* are made leſs depredable. The *Spirit* is made leſs *Predatory*, if either it be condenſed in ſubſtance, as in the uſe of Opiates, and nitrous application, and in contriſtations; or be *diminiſhed in Quantity*, as in ſpare, Pythagorical or Monaſtical Diets: or is ſweetned and *refreſht with motion*, as in eaſe and tranquility. *Ambient Air* is made leſs *Predatory*, either when it is *leſs heated with the beams of the Sun*, as in colder Countries; in Caves, in Hills, and in the Pillars or Stations of Anchorites; or when it is repell'd from the Body, as in dens-cloſe skin; in the Plumage of birds, and the uſe of oyl and unguents without Aromatick ingredients. *The juyce* and ſucculencies of the Body, are made leſs depredable, if either they be made more indurate, or more *dewy*, and *oyly*: Indurate as in *auſtere courſe Diet*; in *a life accuſtomed to cold*, by *ſtrong exerciſes*; by *certain Mineral Baths*: Roſcide or dewy, as in the uſe of Sweet-meats, and abſtinence from Meats, Salt and Acid; but eſpecially in ſuch a mix-

ture

ture of drinks, as is of parts very tenuious and ſubtil, and yet without all acrimony or tartneſs. *Reparation is done by Aliments*; and Alimentation is promoted four ways: *By the Concoction of the inward Parts* for the ſending forth of the nouriſhment; as in *Confortatives* of the Principal Bowels; *by Excitation of the outward parts*, for the attraction of nouriſhment, as in *due exerciſes* and frications; and ſome kind of Unctions and appropriate Baths; *by preparation of the Aliment it ſelf*; that it may more eaſily inſinuate it ſelf, and in a ſort anticipate Digeſtions, as in divers and artificial kinds of *ſeaſoning meat*, *mingling drink*, *leavening bread*, and reducing the virtues of all theſe three into one; by *comforting*, the laſt act of *Aſſimilation*, as in *ſeaſonable ſleep*, and outward or *Topick Applications*: *the Renovation of that which began to wax old*, is performed two ways, either by *inteneration of the habit of the body* it ſelf, as in the uſe of ſuppling or ſoftning applications by Baths, emplaiſters and unctions, of ſuch quality as may ſoak or inſinuate into the parts, but not extract from it; or by *expurgation of the old moiſture*, *and ſubſtitution of new moiſture*, as in ſeaſonable and often purging; letting of blood; attenuating Diets, which reſtore the Flower of the Body, and ſo much for *Indications*.

§ *As for Precepts*, although many of them may be deduced from the *Indications*, yet we thought good to ſet down three of the moſt principal. *Firſt*, we give in *Precept* that the *Prolongation of Life*, muſt be expected from a preſcript ſet Diet, rather than from any familiar regiment of Food, or the excellency of particular Receipts: for whatſoever are of ſuch virtue, as they are able to make nature *retrograde*, are commonly more ſtrong and potent to *alter*, than that they can be compounded together in any Medicine, much leſs be intermingled in familiar food. It remains therefore that ſuch Receipts be adminiſtred regularly, and ſucceſſively, and at ſet appointed times, returning in certain courſes.

§ *Our ſecond Precept is, that the Prolongation of life be expected, rather from working upon ſpirits, and from a malaciſſation or intenération of Parts, than from any kinds of Aliment or order of Diet.* For ſeeing the Body of Man, and the Frame thereof (leaving aſide outward accidents) three ways becomes Paſſiv , namely, *from the ſpirits*; *from the parts*; *and from aliments*; the way of *prolongation of life*, by means of aliment is a long way about, and that by many ambages and circuits; but the ways by working upon the ſpirits, and upon the parts, are more compendious, and ſooner brings us to the end deſired; becauſe the ſpirits are ſuddenly moved, both from vapours and paſſions, which work ſtrangely upon them: and the Parts, by Baths, Unguents, Emplaiſters, which in like manner make way by ſudden impreſſions.

§ *Our third Precept is, that Malaciſſation or intenération of Parts by outward Topicks, muſt be performed by applications Conſubſtantial, Penetrating, and Stringent.* Conſubſtantials are willingly entertained with a kindly imbrace, and properly intenerate and ſupple; *Penetrating* and inſinuating remedies are theDeferents, as it were, of Malaciſſant and mollifying qualities, and convey more eaſily and impreſſedly the virtue thereof; and do themſelves ſomewhat expand and open the Parts. *Reſtringents* keep in the virtue of them both, and for a time

fix it, and alſo cohibite and repreſs perſpiration; which is a thing repugnant to *Malaciſſation or ſuppling*, becauſe it ſends forth the moiſture; wherefore by theſe three (but diſpoſed in order, and ſucceeding than intermixt) the matter is effected. *In the mean* time we give this caveat, that it is not the intention of *Malaciſſation* by outward Topicks to nouriſh Parts; but only to render them more capable of nouriſhment: for whaſoever is more dry, is leſs active to aſſimilate. And thus much of the *prolongation of life*, which is a third part newly aſſigned to Medicine.

§ *Come we now to Coſmetick medicaments, or the Art of Decoration*; which hath indeed, parts Civil, and parts effeminate. For cleanneſs, and the *civil beauty* of the Body was ever eſteemed to proceed from a modeſty of behaviour, and a due reverence *in the firſt place* towards God, whoſe creatures we are, then towards ſociety, wherein we live; and then towards our ſelves, whom we ought no leſs, nay, much more to revere, than we do any others. *But that Adulterate decoration by Painting and Ceruſs*, it is well worthy of the imperfections which attend it; being neither fine enough to deceive, nor handſome to pleaſe, nor ſafe and wholſome to uſe. And it is a wonder that this corrupt cuſtom of *painting*, hath ſo long eſcaped penal Laws, both of the Church and of the State; which yet have been very ſevere againſt the exceſſive vanity of Apparel, and the effeminate trimming of hair. *We read indeed of* Jeſabel *that ſhe painted her face*; *but of* Eſther *and* Judith, *no ſuch matter is reported.*

2 Reg. 9.

§ *Let us proceed to Athletick*, which we take in a ſomewhat more large ſence than uſually it is. For to this we refer any point of *Ability*, whereunto the body of man may be brought, or any aptitude thereto, whether it be of *Activity*, or of *Patience*: whereof *Activity* hath two parts, *ſtrength* and *ſwiftneſs*; and patience likewiſe hath two parts, *Indurance* of *Natural wants*, and *Fortitude* in *torments*. Of all theſe we ſee many times notable Inſtances in the practice of Tumblers; in the hard fare of ſome Salvages; in the wonderful ſtrength of Lunaticks; and in the conſtancy of many in the midſt of exquiſite torments. Nay, if there be any other faculty, which falls not within (as in thoſe that Dive, that obtain a ſtrange power of containing Reſpiration, and the like) we refer it to this part. And that ſuch things may ſometimes be done, is moſt certain: but the Philoſophy and enquiry of cauſes touching them, is commonly neglected; for this reaſon, as we ſuppoſe, becauſe men are perſwaded, that ſuch maſteries and commands over Nature, are obtained either by a peculiar inbred aptneſs of ſome men, which falls not within the rules of diſcipline; or from a continual cuſtom from childhood, which rather is commanded than taught. Which though it be not altogether ſo true, yet to what end ſhould we note any *Deficience*? for the *Olympick games* are down long ſince; and a mediocrity in theſe things is enough for uſe; but an excellency in them ſerveth commonly but for Mercenary oſtentation.

§ *In the laſt place we come to Arts of Pleaſure:* They, as the ſenſes to which they refer are of two kinds, *Painting* delights the eye, eſpecily, with an infinite number of ſuch Arts appertaining to Magnificence about Buildings, Gardens, Garments, Veſſels, Cups, Gemms, and the like. *Muſick delights the ear*, which is ſet out with ſuch variety and preparation

preparation of Voices; Airs and Inſtruments. In ancient time water-Inſtruments were eſteemed the chief Organs of that Art which now are almoſt grown out of uſe. *Theſe Arts belonging to the eye and the ear*, are principally above the reſt accounted *Liberal*; theſe two ſenſes are more chaſte; the Sciences thereof more learned, as having in their train the Mathematick Art as their Hand-maid: So the one is referr'd to Memory and Demonſtrations; the other unto Manners, and the Paſſions of the Mind. The delight of the other ſenſes and the Arts about which they are converſant, are in leſs reputation and credit, as drawing nearer to ſenſuality than magnificence. Unguents; Odors; Dainties; Delicious fare, and Incitements to Luſts; need rather a Cenſor to repreſs them, than a Doctor to inſtruct them. And it is well obſerved by ſome, *That while States and Commonwealths have been in their growth and riſing, Arts military have flouriſht; when they have been ſetled and ſtood at a height, Arts liberal; and drawing to their declenſion and ruin, Arts voluptuary.* And it is to be fear'd that this age of the world being ſomewhat upon the deſcent of the wheel, inclines to *Arts voluptuary:* Wherefore we paſs them over. With *Arts voluptuary* I couple *Practices Joculary*; for the deceiving of the ſenſes, may be ſet down as one of the delights of the ſenſes.

§ *And now we have gone through the Knowledges concerning the Body of man (Phyſick, Coſmetick, Athletick* and *Voluptuary)* we admoniſh thus much by the way; that ſeeing ſo many things fall into conſideration about the *Body of man*, as *Parts, Humours, Functions, Faculties, Accidents*; and ſeeing (if we could aptly do it) an entire Body ſhould be made touching the *Body of man*, which might comprehend all theſe, (like to that of *the knowledge of the Soul*, whereof we ſhall ſpeak anon) notwithſtanding leſt Arts ſhould be too much multiplied, or the ancient Limits of Arts tranſpos'd, more than need muſt; we receive into the Body of Medicine, *the knowledge of the Parts of mans Body, of Functions, of Humours; of Reſpiration, of Sleep; of Generation; of the fruit of the Womb, of Geſtation in the Womb; of Growth; of the flower of Age; of what Hairs; of Impinguation*, and the like; although they do not properly pertain to thoſe three duties of *Conſervation of Health; Cure of Diſeaſes; Prolongation of Life:* But becauſe mans body is every way the Subject of Medicine. *As for voluntary motion*, and ſenſe, we refer them to the *knowledge concerning the Soul*; as two principal Parts thereof. And ſo we conclude *the knowledge which concerns mans Body*, which is but the *Tabernacle of the Soul.*

CHAP. III.

I. The Partition of *Humane Philoſophy concerning the Mind, into knowledge of the inſpired Eſſence; and into the knowledge of the ſenſible, or producted Soul.* § A ſecond Partition of *the ſame Philoſophy, into the knowledge of the Subſtance and Faculties of the Soul, and the knowledge of the uſe and objects of the Faculties.* II. Two Appendices of *the knowledge concerning the Faculties of the Soul.* § *The knowledge of Natural Divination;* § *And the knowledge of Faſcination.* III. The Diſtribution *of the Faculties of the ſenſible Soul.* § *Into Motion; and* § *into Senſe.*

I. NOw *let us proceed to the Knowledge which concerns the Mind or Soul of man*, out of the treaſures whereof all other Knowledges are extracted. *It hath two Parts, the one entreateth of the Reaſonable Soul, which is a thing Divine; the other of the unreaſonable Soul, which is common to us with Beaſts.* We have noted a little before (where we ſpeak of Forms) thoſe two different *Emanations of Souls*, which in the firſt Creation of them both, offer themſelves unto our view, that is, that one hath its original from the *Breath of God*; the other from the *Matrices of the Elements*; for of the Primitive Emanation of the Rational Soul; thus ſpeaks the Scripture, *Deus formavit*
Gen. 2. *hominem de limo terræ, & ſpiravit in faciem ejus ſpiraculum vitæ:* But the Generation of the unreaſonable Soul, or of Beaſts, was accom-
Gen. 1. pliſht by theſe words; *Producat Aquâ; Producat Terra:* And this irrational Soul, as it is in man, is the Inſtrument only to the *Reaſonable Soul*; and hath the ſame original in us, that it hath in Beaſts; namely, *from the ſlime of the earth*; for it is not ſaid *God form'd the Body of man, of the ſlime of the earth, but God formed man*, that is the whole man *that Spiraculum* excepted. Wherefore we will ſtile that part of the general knowledge concerning *mans ſoul*, the knowledge of the *ſpiracle, or inſpired ſubſtance*; and the other Part, the knowledge *of the Senſible* or *Product Soul.* And ſeeing that hitherto we handle Philoſophy only (placing *ſacred Theologie* in the cloſe of this work) we would not have borrowed this Partition from *Divinity*, if it had not here concurr'd with the Principles of *Philoſophy. There are many and great Precellencies of the ſoul of man, above the ſouls of beaſts*, evident unto thoſe who philoſophize even according to ſenſe: And whereſoever the concurrent Characters of ſuch great excellencies are found, there ſhould ever, upon good reaſon, be made a *ſpecifick Difference.* Wherefore we do not altogether ſo well allow the Philoſophers promiſcuous, and confuſe Diſcourſes touching *the Functions of the Soul*; *as if the Soul of man was differenced gradually, rather than ſpecifickly*; *from the ſoul of Beaſts*; no otherwiſe than the Sun amongſt the Stars, or Gold amongſt Metals.

§ *There remains another partition alſo to be annexed to the Knowledge in General concerning the ſoul or mind of man*, before we ſpeak at large of the kinds: For what we ſhall ſpeak of the *ſpecies* hereafter, comprehendeth

prehendeth both the partitions; as well that which we have ſet down already, as this which we ſhall now propound. *Wherefore the ſecond Partition may be, into the knowledge concerning the Subſtance and Faculties of the Soul*; and into the knowledge *concerning the uſe and objects of the Faculties.*

§ This two-fold Partition of the Soul thus premis'd, let us now come unto the ſpecies or kinds. The knowledge of the *Spiraculum*, or *inſpired Eſſence*, as that concerning the ſubſtance of the Reaſonable Soul, comprehends theſe Inquiries touching the Nature thereof; as whether, *it be Native*, or *Adventive*; *Separable*, or *Inſeparable*; *Mortal*, or *Immortal*; *how far it is tied to the Laws of Matter, how far, not, and the like?* What other points ſoever there are of this kind, although they may be more diligently, and ſoundly inquired even in Philoſophy, than hitherto they have been; yet for all this, in our opinion, they muſt be bound over at laſt, unto Religion, there to be determined and defined; for otherwiſe they ſtill lye open to many errors and illuſions of ſenſe. *For ſeeing that the ſubſtance of the Soul was not deduced and extracted in her Creation from the Maſs of Heaven and Earth, but immediately inſpired from God; and ſeeing the Laws of Heaven and Earth are the proper ſubjects of Philoſophy; how can the knowledge of the ſubſtance of the Reaſonable Soul be derived or fetch'd from Philoſophy? But it muſt be drawn from the ſame inſpiration from whence the ſubſtance thereof firſt flowed.* Animæ Origo Myſterium.

§ The Knowledge of the *ſenſible or producted Soul*, as touching the ſubſtance thereof is truly enquired into; but this enquiry ſeems to us to be *Deficient:* For what makes theſe terms of *Actus Ultimus*; and *Forma Corporis*; and ſuch like wild logical Univerſalities, to the knowledge of the Souls ſubſtance? For the *ſenſible Soul*, or the ſoul of Beaſts, muſt needs be granted, *to be a Corporal ſubſtance attenuated by heat and made Inviſible: I ſay, a thin gentle gale of wind ſwell'd and blown up from ſome flamy and airy Nature, indeed with the ſoftneſs of Air to receive impreſſion, and with the vigor of fire to embrace action; nouriſhed partly by an oily, partly by a watery ſubſtance; ſpread over the Body; reſiding (in perfect Creatures) chiefly in the head; running through the nerves; refreſht and repair'd by the ſpirituous blood of the Arteries*; as *Bernardinus Teleſius*, and his Scholar, *Auguſtinus Donius* in ſome points, not altogether unprofitably, have delivered it. Let there be therefore made a more diligent enquiry touching this knowledge, and the rather for that this point, not well underſtood hath brought forth ſuperſtitious and very contagious opinions, and moſt vilely abaſing the Dignity of the *ſoul of man*; of *Tranſmigration of ſouls out of one body into another*; *and Luſtrations of ſouls by Periods of years*; *and finally of the too near affinity in every point of the ſoul of man, with the ſouls of beaſts.* This ſoul in *Beaſts is a principal ſoul*, whereof the body of Beaſts is the Organ; but *in man this ſoul is it ſelf an Organ* of the Soul Rational and may rather be called by the appellation of a *Spirit*, than of a *Soul.* And thus much of the *ſubſtance of the Soul.*

* DE SUBSTANTIA ANIMÆ SENSIBILIS

Tele: de Rer. Nat. lib. 5. Donius.

§ *The Faculties of the Soul are well known, to be Underſtanding*; *Reaſon*; *Imagination*; *Memory*; *Appetite*; *Will*, and all thoſe Powers, about which the Sciences of *Logick* and *Ethick* are converſant. But in the *knowledge concerning the ſoul, the Original of theſe Faculties* ought to be handled

handled, and that Phyſically, as they are connatural with the Soul, and adhere to it: Only their *uſes* and *objects* are deſigned to other Arts. And in this part (in our opinion) there hath been no extraordinary performance hitherto; although we do not report it as *Deficient.*

¶ This Part *touching the faculties of the Soul* hath *two Appendices*, which as they have been handled have rather preſented us with ſmoak, than any lucid flames of truth; one of theſe is the Knowledge of *Natural Divination*; the other of *Faſcination.*

§ *Divination* hath been anciently and fitly divided into two Parts; *Artificial* and *Natural. Artificial* by arguing from the Indication of ſigns, collects a *Prediction: Natural* from the internal *Divination* of the mind without the aſſiſtance of ſigns, makes a Preſage. *Artificial is of two ſorts*; one argueth from *Cauſes*; the other from *Experiments* only, by a blind way of Authority; which later is for the moſt part ſuperſtitious, ſuch as was the Heathen Diſcipline upon the *inſpection of the Intrals of Beaſts*; *the Flight of Birds*; and the like: So the ſolemn Aſtrology of the Chaldeans was little better. Both the kinds of *Artificial Divination* are diſtributed amongſt divers Sciences. The Aſtrologer hath his *Predictions* from the ſituation of the ſtars; the Phyſician hath his *Predictions*, of the approach of Death; of Recovery; of enſuing Symptomes of Diſeaſes; from Urines; Pulſes; aſpect of Patients, and the like. The Politick hath his *Predictions*; *O urbem venalem & citò perituram, ſi emptorem invenerit*, The truth of which *Propheſie* ſtaid not long, being firſt accompliſht in *Sylla*, after in *Cæſar.* Wherefore Predictions of this Nature are not pertinent to the preſent purpoſe, but are to be referred over to their proper Arts. But the *Divination Natural*, which ſpringeth from the internal Power of the Soul, is that which we now ſpeak of. *This is of two ſorts, the one Native; the other by Influxion. Native* is grounded upon this ſuppoſition, *that the mind when it is withdrawn and collected into it ſelf, and not diffuſed into Organs of the Body, hath from the natural Power of its own Eſſence, ſome Prenotion of things future.* And this appears moſt in ſleep; Extaſies; Propinquity of Death; more rare, in waking, or when the Body is healthful and ſtrong. And this ſtate of the mind is commonly procured and furthered by abſtinencies, and thoſe obſervances which do moſt of all retire the *Mind* unto it ſelf from the practick functions of the *Body:* that thus redeem'd from the incumbrances of exterior ingagements, it may poſſeſs and enjoy its own Nature. *But Divination by Influxion* is grounded upon another ſuppoſition, *That the Mind as a Mirror or Glaſs ſhould take a ſecondary kind of Illumination from the fore-knowledge of God and Spirits; unto which the ſame State and Regiment of the Body which was to the firſt, doth likewiſe conduce.* For the ſame ſequeſtration of the mind cauſeth it more ſeverely to employ its own Eſſence; and makes it more ſuſceptive of *Divine Influxions:* ſave that the ſoul, in *Divinations by Influction* is rapt with a kind of fervency and impatiency, as it were of the Deity, wherewith it is poſſeſt (which the Ancients noted by the name of *ſacred Fury*; but in *Native Divination*, the mind is enfranchis'd and neerer to a repoſe rather, and an immunity from labour.

Saluſt. in Jugurth.

§ *Faſcination is the Power and intenſive Act of the Imagination upon the Body of another*, (for of the Power of the *Imagination* upon the Body of

of the imaginant, we have ſpoken before). In this kind the *ſchool of Paracelſus*, and the Diſciples of pretended *Natural Magick*, have been ſo intemperate, as they have only not equall'd the force and apprehenſion of the *Imagination*, with the Power of *miracle-working faith*. Others, drawing nearer to the ſimilitude of truth, when they had more intentively conſidered the ſecret energies and impreſſions of things; the Irradiations of the ſenſes; the tranſmiſſions of cogitations from Body to Body; the conveyances of Magnetick virtues; came to be of opinion, that much more might ſuch impreſſions; Informations; and Communications be made, from ſpirit to ſpirit; being that a ſpirit of all other things is more powerful and ſtrong to work, and more ſoft and penetrable to ſuffer: whence the conceits have grown, made almoſt popular, of the Maſtering ſpirit; of men ominous and unlucky; of the ſtrokes of love and envy; and of others of like Nature. Incident unto this, is the enquiry, *How the Imagination may be intended and fortified?* For if the *Imagination* fortified be of ſuch great power, then it is material to know by what ways it may be exalted, and made greater than it ſelf? And here comes in crookedly, and as dangerouſly a Palliation and Defence of a great part of *Ceremonial Magick*. For it may be a ſpecious pretence, that Ceremonies; Characters; Charms; Geſticulations; Amulets, and the like, *do work not by any tacit or ſacramental contract with evil ſpirits; but ſerve only to ſtrengthen and exalt the imagination of him that uſeth them; even as the uſe of Images in religion hath prevail'd for the fixing of mens minds in the Contemplation of things, and the raiſing of the devotion of them that* Pray. But for my own judgment, if it be admitted, that the force of *Imagination* is ſo Potent, and that Ceremonies exalt and fortifie that Power; and be it granted, that Ceremonies are uſed ſincerely to that intention, and as a Phyſical Remedy, without the leaſt thought of inviting the aſſiſtance of Spirits by them; yet for all this, I ſhould hold them unlawful, becauſe they impugn and contradict that divine Edict paſs'd upon man for ſin, *In ſudore vultus comedes panem tuum*. For this kind of *Magick* propounds thoſe noble fruits, (which God hath ſet forth to be bought at the price of Labour) to be purchas'd by a few eaſie and ſlothful obſervances,

Par. In Param.

Crollij Prax.

Gen. 3.

III. There remain two knowledges, which refer ſpecially to the *Faculties of the inferior or ſenſible Soul*, as thoſe which do moſt Communicate with corporal Organs; the one is of *Voluntary Motion*, the other of *ſenſe and ſenſibility*.

§ In the former of theſe the Inquiry hath been very ſuperficial, and one entire part almoſt quite left out. For concerning the office and apt fabrick of the Nervs and Muſcles, and of other parts requiſite to *this Motion*, and which part of the Body reſts whilſt another is moved, and that the Governour and Chariot-driver, as it were, of this *Motion*, is the *Imagination*; ſo as diſmiſſing the *Image* to which the *Motion* was carried, the *Motion* it ſelf is preſently intercepted and arreſted (as when we walk, if another ſerious and fixed thought come into our mind, we preſently ſtand ſtill) and many other ſuch ſubtilties not to be ſlighted, have now long ago come into Obſervation and Enquiry. *And how Compreſſions*, and *Dilatations*, and *Agitations of the Spirit* (which without queſtion is the ſpring of *Motion*, ſhould incline, excite, and enforce the

* DE NIXIBUS SPIRITUS IN MOTU VOLUNTARIO.

the corporal and ponderous Mass of the Parts, *hath not yet been enquired into*, and handled with diligence; and no marvail, seeing the sensible soul it self hath been hitherto taken for an *entelechie*, or *self-moving Facultie*, and some Function, rather than a substance. But now it is known to be a corporal and materiate Substance; it is necessary to be enquired, by what efforts such a pusil and a thin soft air should put in motion, such solid and hard bodies. Therefore seeing this part is *Deficient* let *enquiry* be made thereof.

§ *But of sense and sensibility* there hath been made a far more plentiful and diligent enquiry, both in General Treatises about them, and in Particular Sciences; as in *Perspective*, and *Musick*; how truly, is not to our purpose to deliver. Wherefore we cannot set them as *Deficients: Notwithstanding* there are two noble and remarkable Parts, which in this knowledge we assign to be *Deficient*; the one concerning *the difference of Perception and Sense*; the other concerning the *Form* of *Light*.

* DE DIFFERENTIA PERCEPTIONIS ET SENSUS

§ *As for the Difference between Perception and Sense*, Philosophers should in their writings *de sensu & sensibili* have premis'd a solid and sound discovery thereof, as a matter Fundamental. For we see that there is a manifest power of *Perception* even in all Bodies Natural; and a kind of Election to embrace that which is any way allied in nature, and favourable to them; and to fly what is adverse and foreign. Neither do we mean of more subtile *Perceptions* only, *as when the Loadstone draws unto it Iron*; *Flame leaps to Bituminous Mould*; one Bubble of water near another Bubble, closeth and incorporates with it; Rays glance from a white object; the Body of a living Creature assimilates that which is good for it, excerneth what is unprofitable; a piece of spunge even when it is rais'd above the surface of the water, sucks in water, expels air; and the like. For to what end should we enumerate such instances, seeing no body plac'd neer to another, changeth the other, or is changed of it, unless a reciprocal *Perception* precede the operation. Every Body hath a *Perception* of the Pores and Passages by which it insinuates it self; it feels the invasion of another Body, to which it yieldeth; it *perceivs* the remove of another Body, by which it was detained; when it recovers it self, it *perceivs* the divulsion of its continuance, which for a time resisteth; and in a word, *Perception* is diffused through the whole body of Nature. Air doth so exactly *Sense* Hot and Cold, that the *Perception* thereof is far more subtile than mans Touch, which yet is taken for the discerning Rule of Hot and Cold. *Two faults* therefore are found concerning this knowledge; that men have for most part past it over untoucht, and unhandled; which notwithstanding is a most noble speculation: The other is that they who perchance have addicted their minds to this contemplation, have in the heat of this Pursuit gone too far, and attributed *Sense to all Bodies*, that it is almost a piacular crime to *pull of a bow from a Tree, lest it should groan and complain as Polydore did.* But they should explore with diligence the difference of *Perception* and *Sense*, not only in comparing of *Sensibles* with *Insensibles* according to the entire body (as of Plants, and living Creatures) but also to observe in the sensible Body, what should be the cause that so many Actions should be discharg'd, and that without any *Sense* at all? Why Aliments are digested,

Campanella, alij.

Virg. Æn. 3.

geſted, egeſted: Humours and ſucculent Moiſtures carried upwards and downwards; the Heart and Pulſe beat; the Guts as ſo many Shops, or Work-houſes ſhould every one accompliſh his proper Work, and yet all theſe, and many ſuch like are performed without *Senſe*? But men have not with ſufficient enquiry ſearcht or found out of what Nature the Action of *Senſe* is; and what kind of Body; what delay; what Conduplication of Impreſſion are required to this, that pain or pleaſure ſhould follow? To cloſe this Point they do ſeem to be altogether ignorant of the difference betwixt *ſimple perception and ſenſe; how far perception may be made without ſenſe?* Nor is this enquiry a controverſie of words, but a matter of great and important moment. *I therefore let* there be made a better *inquiry* of this knowledge, as of a matter very profitable, and of manifold uſe. Conſidering alſo that the ignorance of ſome of the ancient Philoſophers touching this matter, ſo far obſcured the light of reaſon, as that they thought, *there was, without any difference, a Soul infuſed into all Bodies*; nor did they conceive how *Motion*, with a diſcerning inſtinct, could be made with *Senſe*; or *Senſe* exiſt without a *Soul*.

§ *As for the Form of Light*, that there hath been made a due enquiry thereof (ſpecially ſeeing men have ſo painfully employ'd their Studies in the *Perſpectives*) may well be cenſur'd as a ſtrange overſight. For neither in the *Perſpectives*, nor elſewhere, is there any thing inquired concerning *Light*, of any worth or weight: The Radiations of it are handled, the Originals not: *But the placing of Perſpectives amongſt the Mathematicks hath begotten this defect; and others of like nature; becauſe men have made a too early departure from Phyſick.* So on the other ſide the handling of *Light*, and the Cauſes thereof, in *Phyſicks* is commonly ſuperſtitious, as of a thing of a middle nature, betwixt natural and Divine; in ſo much as ſome of *Plato's* School have introduced *Light* as a thing more ancient than *Matter it ſelf*: For when the empty ſpace was ſpread abroad they affirm'd, in a vain imagination, that it was firſt fill'd with *Light*; and afterwards with a *Body*; whereas Holy Writ ſets down plainly *the Maſs of Heaven and Earth to be a dark Chaos before the Creation of Light*. But what are handled Phyſically, and according to ſenſe, of this ſubject, preſently deſcendeth to *Radiations*; ſo as there is very little Philoſophical enquiry extant touching this point. And men ought to ſubmit their Contemplations a while, and to enquire what is common to all *Lucid Bodies*, as of the *Form* of *Light*: For what an immenſe difference of Body is there (if they may be conſidered according to their dignity) betwixt the Sun and the rotten Wood, or the putrid ſcales of Fiſh? They ſhould likewiſe make enquiry, what ſhould be the Cauſe why ſome things take fire, and once throughly heated caſt forth a *Light*; others not? Iron, Metals, Stones, Glaſs, Wood, Oyl, Tallow by fire, either caſt forth a *Flame*, or at leaſt grow *Red*: But *Water* and *Air* heated with the fury of the hotteſt Flames, to the higheſt degree they are capable of, acquire no ſuch Light, nor caſt forth any Splendor. If any man think, it therefore thus comes to paſs, becauſe it is the property of fire to *give light*; but *Water* and *Air* are utter enemies to *Fire*; ſure he was never rowed with Oars in a dark night upon ſalt waters, and in a hot ſeaſon; where he might have ſeen ſmall drops of water rebounding from the claſhing of the Oars, to

RADIX & PERSPECTIVÆ SIVE DE FORMA LUCIS.

Ficin. Cardan. Cæſa.

Gen. 1.

ſparkle and caſt forth a *light:* Which is likewiſe ſeen in the fervent froath of the Sea which they call the *Sea-longs*. And what affinity with flame and fired matter have the *Cicindulæ*, the *Luciolæ*, and the *Indian Fly*, which caſt a light over a whole arched Room; or the eyes of certain living Creatures in the dark; and Sugar, as it is grated or broken; or the ſweat of a horſe hard ridden, in a foultry night; and many more? *Nay, many have underſtood ſo little in this point, as many have thought the ſparks from a flint to be attrited Air.* But when the Air is not fired with heat, and apparently *conceives Light*, how comes it to paſs, that Owls and Cats, and many other Creatures ſee in the night? *So that it muſt needs be (ſeeing viſion cannot be conveyed without light) that there is a native and inbred light in Air, although very feeble and weak; yet ſuch as may be proportioned to the Optick Beams of ſuch Creatures, and may ſuffice them for ſight.* But the cauſe of this evil, as of many more, that men have not drawn forth the *common Forms of things Natural*, from *particular Inſtances*; which is that we have ſet down as the proper ſubject of *Metaphyſick*; which is it ſelf a part of *Phyſick*, or of the knowledge of *Nature*. Therefore let there be *enquiry* made of the *Form and Originals of Light*, and in the mean time, it may be placed among *Deficients*. And thus much of the *Knowledge concerning the ſubſtance of the Soul, Rational and Senſible*, with their *Faculties*, and of the *Appendices* of the *ſame Knowledge*.

THE

THE

Fifth Book

OF

FRANCIS L. VERULAM

VICOUNT St *ALBAN*,

OF THE

Dignity and Advancement

OF

LEARNING.

To the KING.

CHAP. I.

I. The Partition *of the Knowledge, which reſpecteth the Uſe, and Objects of the Faculties of the Mind of Man, into Logick, and Ethick.* II. The Diviſion of *Logick into the Arts, of Invention; of Judgement; of Memory; and of Tradition.*

THE Knowledge reſpecting the *underſtanding of Man (Excellent King)* and that other reſpecting *his Will*, are, as it were, Twins by Birth: For the *Purity of Illumination, and the Liberty of will began together; fell together: Nor is there in the Univerſal Nature of things ſo intimate a Simpathy, as that of Truth and Goodneſs.* The more ſhame for Learned Men, if they be for Knowledge like *winged Angels*; for baſe Deſires, they be like *Serpents* which crawl in the Duſt, carrying indeed about them Minds like a Mirror or Glaſs; but menſtruous and diſtain'd.

§ *We come now to the Knowledge which reſpecteth the uſe and objects of the Faculties of the Mind of Man.* This hath *two Parts*, and they well known, and by general conſent received, *Logick and Ethick:* Save that we have a little before ſet at liberty *Civil Knowledge*, which commonly was taken in as a Part of *Ethick*; and have made it an entire *Knowledge of man congregate or in ſociety*; handling here *only man ſegre-*

gate. Logick intreateth of the Understanding and Reason; Ethick of the Will, Appetite and affections; the one produceth *Decrees;* the other *Actions.* It is true that the *Imagination* in both Provinces, Judicial and Ministerial, performs the Office of an Agent or Nuncius, or common Atturney. For *Sense* sends over all sorts of Ideas unto the *Imagination*, upon which, Reason afterwards sits in Judgement: And *Reason* interchangeably sends over selected and approved Ideas to the *Imagination*, before the Decree can be acted. For *Imagination* ever precedes voluntary motion and incites it; so that *Imagination* is a common reciprocal Instrument to both: Saving that this *Janus* is bifronted, and turns faces: For the face towards *Reason* hath the print of *Truth*; but the face towards *Action* hath the print of *Goodness:* which nevertheless are faces,

Ovid. Met. ——*Quales decet esse sororum.*

Neither is the *Imagination* a meer and simple Messenger, but is invested with, or at leastwise usurpeth no small Authority, besides the duty of the message: For it is well said by *Aristotle, That the Mind hath over the Body that command which the Lord hath over a bond-man; but the* Reason *hath over the* Imagination *that command which a Magistrate hath over a free Citizen,* who may come also to rule in his turn. For we see that in matters of *Faith* and *Religion*, the *Imagination* mounts, and is elevated above *Reason*; not that *Divine Illumination* resideth in the *Imagination*; (nay, rather in the high Tower of the mind, and understanding) but, *as in virtues Divine, grace makes use of the motion of the will; so in Illuminations Divine, grace makes use of the Imagination:* Which is the Cause that Religion sought ever an access, and way to the *Mind*, by *Similitudes, Types, Parables, Visions, Dreams.* Again, it is no small Dominion the *Imagination* hath in perswasions, insinuated by the power of Eloquence: for where the minds of men are gently intreated, inflamed, and any way forcibly won by the smooth Artifice of speech, all this is done by exalting the *Imagination*, which growing hot and impatient, not only triumphs over *Reason*; but in a sort offers violence unto it; partly by blinding, partly by extimulating it. Nevertheless I see no reason why we should depart from the former Division: For the *Imagination* commonly doth not produce Sciences; for *Poesie* which hath ever been attributed to the *Imagination*, is to be esteemed rather a play of the wit, than a knowledge. As for the power of the *Imagination in things Natural*, we have assigned that, a little before, to the *Doctrine de Anima.* And for the affinity it hath with *Rhetorick*, we think it fit to refer it to the Art it self, whereof we shall intreat hereafter.

Polit. 1.

§ *This Part of Humane Philosophy which is Rational or respecting Logick*, is to the Taste and Palate of many Wits, not so delightful; and seemeth nothing else but a net and snare of thorny subtilty. For as it is truly said, *that knowledge is animi Pabulum*; so in the nature of mens appetites, and election of this *food*, most men are of the taste and stomach of the Israelities in the Desert, that would fain have turned *ad ollas Carnium*, and were weary of *Manna*; which though it were Celestial, yet seemed it less nutritive and comfortable. So generally those *Knowledges* relish best, that have an infusion somewhat more esculent of flesh in them; such

Sen. alicubi.

ſuch as are *Civil Hiſtory*, *Morality*, *Policy*, about the which mens affections; Praiſes, Fortunes do turn, and are converſant: But this ſame *lumen ſiccum*, doth parch and offend moſt mens watry and ſoft natures. But if we would meaſure and value things according to their proper worth, *Rational Sciences are the keys of all other Arts; and as the Hand is the Inſtrument of Inſtruments; the Mind, the Form of Forms; ſo theſe knowledges are to be eſteemed the Art of Arts.* Neither do they direct only; but likewiſe ſtrengthen and confirm; as the uſe and habit of ſhooting, doth not only enable to ſhoot a nearer ſhoot; but alſo to draw a ſtronger Bow.

II. *Arts Logical or intelectual are four in number*, divided according to the ends whereunto they are referred: For mans labour in *Rational Knowledges* is, either to *invent that which is ſought; or to judge what is invented; or to retain that which is judg'd; or to deliver that which is retained:* So as there muſt needs be ſo many *Rational Sciences*; Art of *Inquiry* or *Invention*; Art of *Examination* or *Judgement*; Art of *Cuſtody* or *Memory*; and Art of *Elocution* or *Tradition*; whereof we will ſpeak, of every particular apart.

CHAP. II.

I. The Partition *of the Art of Invention into the Inventive of Arts: and of Arguments.* § The former of theſe, which is the more eminent, is *Deficient.* II. The Diviſion *of the Inventive Art of Arts, into literate Experience.* § *And a new Organ.* III. A Delineation *of Experience Literate.*

I. *INvention is of two kinds, much differing; the one of Arts and Sciences; the other of Arguments* and *Speeches.* The former of theſe I report to be wholly *Deficient*, which ſeems to me to be ſuch a *Deficence*, as if in the making of an *Inventory*, touching the eſtate of a *Defunct*, it ſhould be ſet down, *of ready money nothing:* For as *money* will fetch all other commodities; ſo all other *Arts* are purchas'd by *this Art.* And *as the Weſt Indies* had never been diſcovered, if the uſe of the *Mariners Needle* had not firſt been diſcovered, though thoſe *Regions* be vaſt, the *Verſor* is a ſmall Motion: So it cannot be found ſtrange, if *in the diſcovery and advancement of Arts*, there hath not been made greater Progreſſion, ſeeing the *Art of Invention and Perluſtration* hitherto was unknown. * EXPERIENTIA LITERATA, SIVE VENATIO PANIS.

§ *That this part of knowledge is wanting ſtands plainly confeſſed.* For firſt *Logick* doth not profeſs, nay, not pretend to *invent* either Arts *Mechanical*, or Arts (as they call them) *Liberal*; nor to elicite the *Operations* of the one, or the *Axioms* of the other; but ſpeaks to men as it were in Paſſage, and ſo leaves them with this inſtruction, *cuiq; ſuâ arte credendum. Celſus* a wiſe man, as well as a Phyſician (though it be the cuſtom of all men to be copious in the commendation of their own Profeſſion) acknowledgeth it gravely and ingeniouſly, ſpeaking of the Emperical and Dogmatical Sects of Phyſicians, *That Medicines and* Ariſt. Moral. 1.

Cures

De Re Medica. *Cures were first found out, and then after the Reasons and Causes were discovered: not the other way, that the Causes first extracted from the nature of things, gave light to the invention of Remedies.* But *Plato* often notes it; *That particulars are infinite; again, that the highest Generalities give no sufficient Direction; and that the Pyth of all Sciences, whereby the Arts-man is distinguisht from the Inexpert, consisteth in middle Propositions, which experience hath delivered and taught in every particular Science.* And therefore we see, that they which discourse of the first *Inventors of things, and the Originals of Sciences,* have celebrated rather *Chance* than *Art*; and have brought in *Beasts, Birds, Fishes, Serpents,* rather than *Men,* as the first Doctors of Sciences.

In Timæo. Phileb. alibi.

Virg. Æn. 12.

Dictamnum Genetrix Cretæâ carpit ad Ida,
Puberibus Caulem foliis, & flore comantem
Purpureo, non illa feris incognita Capris
Gramina, cum tergo volucres hæsere sagittæ.

So that it was no marvail (the manner of Antiquity being for to consecrate *Inventors* of things profitable) that the Ægyptians, an ancient Nation, to whom many Arts owe their Beginnings, had their Temples full of the Idols of Brutes, but almost empty of the Idols of men,

Virg. Æn. 8.

Omnigenumq; Deûm monstra & Latrator Anubis,
Contra Neptunum, & Venerem, contraq; Minervam, &c.

And if you like better, from the Tradition of the Grecians, to ascribe the *first invention of Arts to men*; yet you cannot say that *Prometheus* applied his contemplation on set purpose to the invention of Fire; or that when he first stroak the flint he expected sparks; but that he fell upon this experiment by chance, and as they say, ——*furtum Jovi feciſſe*; so as for the *Invention of Arts* we are more beholding to a wild Goat for Chirurgery; or to a Nightingal for modulations of Musick; the *Ibis* for Clysters; to a Potlid that flew open for Artillery; and to say in a word, to *Chance*, or any thing else more than to *Logick*. Neither is the form of *Invention*, which *Virgil* describes, much other,

Ovid. Horat &c.

Pamirol. Jus Rer. Mem. Pa. 2.

Virg. G. 1. *Et varias usus meditando extunderet Artes*
Paulatim——

For here is no other method of *Invention* propounded, than that which brute Beasts are capable of, and often put in ure, *which is a most intentive sollicitude about some one thing, and a perpetual practice thereof; which the necessity of their Conservation imposeth upon such Creatures*; for *Cicero* saith very truly, *usus uni rei deditus, & naturam & artem sæpe vincit*. Therefore if it be said of men,

Oratio. pro L. Cor. Balbo.

Virg. G. 1. *Labor omnia vincit*
Improbus, & duris urgens in rebus egestas.

It

It is likewiſe ſaid of Beaſts,

Quis expedivit Pſittaco ſuum Καῖρε ; Perſ. Prol.

Who taught the Raven in a droughth to throw Pebbles into a hollow tree, where by chance ſhe ſpied water, that the water might riſe ſo as ſhe might come to it? Who taught the Bee to ſail through ſuch a vaſt ſea of Air, to the Flowers in the Fields; and to find the way ſo far off to her Hive again? Who taught the Ant to bite every grain of Corn that ſhe burieth in her Hill, leſt it ſhould take root and grow, and ſo delude her hope? And if you obſerve in *Virgil*'s verſe, the word *extundere*, which imports the *Difficulty*, and the word *Paulatim*, which imports the *ſlowneſs*; we are where we were, even amongſt the *Egyptian Gods*, ſeeing hitherto men have made little uſe of the faculty of *Reaſon*, none at all of the *duty of Art*, for the *diſcovery of Inventions*. Plin. Nat. H.

§ Secondly, if this which we affirm, be well conſidered, it is demonſtrated by the *Form of Induction* which Logick propounds, namely by that *Form of Inference*, whereby the Principles of Sciences are found out and proved; which, as it is now framed, is utterly vitious and incompetent, and ſo far from perfecting nature, that it rather perverts and diſtorts it. For he that ſhall exactly obſerve how this *Æthereal Dew of Sciences*; like unto that the Poet ſpeaks of,

Aerei mellis Cæleſtia dona,

is gather'd (ſeeing that even Sciences themſelves are extracted out of particular examples, partly Natural, partly Artificial, or from the Flowers of the Field and Garden) ſhall find that the mind, of her own nature and inbred diſpoſition, doth more ingeniouſly, and with better Invention, Act an *Induction*, than Logicians deſcribe it. For from a *nude enumeration of Particulars* (as Logicians uſe to do) without an Inſtance Contradictory, is a vitious Concluſion; nor doth ſuch an *Induction* infer more than a probable Conjecture. For who will take upon him, when the particulars which a man knows, and which he hath mention'd, appear only on one ſide, there may not lurk ſome particular which is altogether repugnant? As if *Samuel* ſhould have reſted in thoſe ſons of *Iſhay*, which were brought before him in the houſe; and ſhould not have ſought *David*, which was abſent in the field. And this *Form of Induction* (to ſay plainly the truth) is ſo groſs and palpable, that it might ſeem incredible, that ſuch acute and ſubtil wits as have exercis'd their meditations in theſe things, could have obtruded it upon the world; but that they haſted to Theories, and Dogmaticals; and from a kind of pride and elation of mind deſpiſed *particulars*, ſpecially any long ſtay upon them. *For they have uſed theſe examples and particular inſtances, but as Sergeants and Whifflers, ad ſummovendam turbam, to make way and room for their opinions; and never adviſ'd with them from the beginning; that ſo a legitimate and mature deliberation, concerning the truth of things, might be made.* Certainly it is a thing hath touch'd my mind with a pious and religious wonder, to

ſee

ſee the ſame ſteps leading to error, troden in divine and humane enquiries. For as in the apprehending of divine truth, men cannot endure to become as a child; ſo in the apprehending of humane truth, for men come to years, yet to read, and repeat, the firſt Elements *of Inductions*, as if they were ſtill children, is reputed a poor and contemptible employment.

§ Thirdly if it be granted, that the *Principles* of Sciences may be rightly inferr'd from the *Induction*, which they uſe, or from ſenſe and experience; yet nevertheleſs, certain it is, that inferiour Axioms, cannot rightly and ſafely be deduced, by Syllogiſm from them, in things of nature, which participate of matter. For in *Syllogiſm* there is a reduction of Propoſitions to *Principles* by middle Propoſitions. And this Form, whether for *Invention*, or for *Proof*, in Sciences Popular, as *Ethicks*, *Politicks*, *Laws*, and the like, takes place; yea, and in Divinity; ſeeing it hath pleaſed God of his goodneſs, to accommodate himſelf to mans capacity: but in Natural Philoſophy where nature ſhould be convinc'd and vanquiſht by deeds, and not an Adverſary, by Argument; truth plainly eſcapes our hands: *becauſe that the ſubtilty of the operations of Nature, is far greater than the ſubtilty of words.* So that the *Syllogiſm* thus failing, there is every way need of help and ſervice, of true and rectified *Induction*, as well for the more general Principles, as inferiour Propoſitions. *For Syllogiſms* conſiſt of Propoſitions, Propoſitions of words, words are the currant tokens or marks of the Notions of things; wherefore *if theſe Notions (which are the ſouls of words)* be groſſely, and variably abſtracted from things, the whole building falls. Neither is it the laborious examination either of Conſequences, Arguments, or the verity of Propoſitions, that can ever repair that ruine; being the error is, as the Phyſicians ſpeak, in the *firſt digeſtion*; which is not rectified by the ſequent functions of Nature. And therefore it was not without great and evident Cauſe, that many of the Philoſophers, and ſome of them, ſome of ſingular note, became *Academicks*; and *Scepticks*; which took away all *certainty of knowledge* or of *Comprehenſions*; and denyed that the knowledge of man extended further than apparence and probability. It is true that ſome are of opinion, that *Socrates*, when he put off certainty of ſcience from himſelf, did this but by a form of *Irony*, *& ſcientiam diſſimulando ſimulaſſe*; that is, that by renouncing thoſe things which he manifeſtly knew, he might be reputed to know even that which he knew not; neither in the later Academy, which *Cicero* embraced, was this opinion of *Acatalepſie* held ſo ſincerely: For all thoſe which excell'd for eloquence, commonly made choice of this Sect, as fitter to give glory to their copious ſpeech, and variable diſcourſe both ways; which was the cauſe they turn'd aſide from that ſtreight way by which they ſhould have gone on to truth, to pleaſant walks made for delight and paſtime. *Notwithſtanding* it appears that there were many ſcatter'd in both Academies, the old and new (much more among the *Scepticks*) that held this *Acatalepſie* in ſimplicity and integrity: But here was their chief error, that they charged the *Perceptions* of the *Senſes*, whereby they did extirpate and pluck up Sciences by the roots. For the ſenſes although they many times deſtitute and deceive men, yet aſſiſted by much induſtry they may be ſufficient for Sciences; and that not ſo much by the help of *Inſtruments* (though theſe

Cic. in Acad.

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are in ſome ſort uſeful) as of experiments of the ſame kind, which may produce more ſubtil objects, than for the faculty of ſenſe, are by ſenſe comprehenſible. And they ought rather to have charged the defects in this kind upon the errors, and contumacie of the mind, which refuſeth to be pliant and morigerous to the Nature of things; and to crooked demonſtrations and rules of arguing and concluding, ill ſet down and propounded from the *Perception of Senſe*. This we ſpeak not to diſable the mind of man; or that the buſineſs ſhould be abandoned; but that apt and proper aſſiſtances may be accquired; and applied to the underſtanding, whereby men may ſubdue the difficulties of things, and the obſcurity of Nature. *For no man hath ſuch a ſteadineſs of hand by nature or practice, that he can draw a ſtrait line or make a perfect circle with his hand at liberty, which yet is eaſily done by rule or compaſs.* This is that very buſineſs which we go about and with great pains endeavour, *that the mind by the help of Art might be able to equal Nature*; and that there might be found out an Art of Diſcovery, or Direction, which might diſcloſe, and bring to light other Arts, and their Axioms and Works. This upon good ground we report *Deficient*.

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II This Art of *Diſcovery* (for ſo we will call it) hath two parts; for either the Indication is made from *Experiments* to *Experiments*; or from *Experiments to Axioms*; which may likewiſe deſign *new Experiments*; whereof the former we will term, *Experientia Literata*; the later, *Interpretatio Naturæ*, or *Novum Organum*. Indeed the former (as we have touched heretofore is not properly to be taken for an *Art*, or a part of Philoſophy, but a kind of *ſagacity*; wherefore we ſometimes call it *Venatio Panis*, borrowing the name from the Fable. *But as a man may go on his way after a three-fold manner; either when himſelf feels out his way in the dark; or being weak-ſighted is led by the hand of another; or elſe when he directs his footing by a light:* So when a man eſſays all kind of *Experiments* without ſequence or method that is a meer palpation; but when he proceeds by direction and order in *Experiments*, it is as if he were led by the hand; and this is it which we underſtand by *Literate Experience:* For the *light it ſelf*, which was the third way, is to be derived from the *Interpretation of Nature, or the New Organum.*

EXPERIENTIA LITERATA ſive VENATIO PANIS

III. *Literate Experience, or the Hunting of Pan* ſhews the divers ways of making *Experiments:* This (ſeeing we have ſet it down as *Deficient*, and that it is a matter not altogether ſo plain and perſpicuous) we will according to our manner and deſign give ſome light touches and ſhadows of it. The manner of *making Experiment* chiefly proceeds; either by *variation of the experiment*; or by *Production of the Experiment*; or by *tranſlation of the Experiment*; *or by inverſion of the Experiment*; *or by compulſion of the experiment*; *or by Application of the Experiment*; *or by Copulation of the Experiment*; *or elſe by the lots and chance of the Experiment.* And all theſe are limited without the terms of any *Axiom* of *Invention:* For that other part of the *New Organ* takes up and containeth in it all *Tranſition of Experiments into Axioms*; *or of Axioms into Experiments.*

§ *Variation* of *Experience* is firſt practis'd upon *Matter*; that is when the *Experiment* in things already known commonly adhereth to ſuch a *kind of matter*; and now it is tried in other things of like kind; as

the *making of Paper* is only tried in linen, and not in ſilk, (unleſs perchance amongſt the Chineſes; nor yet in ſtuffs intermixt with hair and briſtles, of which is made that which we call chame-lot; nor yet in woollen, cotton, and skins, although theſe three laſt ſeem to be more Heterogeneous, and ſo rather may become uſeful mingled, than ſeparate: So inſition in fruit-Trees, is practis'd, but rarely tried in Trees wild; although it is affirm'd that an Elm grafted upon an Elm, will produce wonderful ſhades of leaves. Inſition likewiſe in flowers, is very rare, though now the Experiment begins to be made upon musk-Roſes, which are ſucceſsfully inoculate upon common Roſes. So we place the *variation in the Part of a thing amongſt the variations in Matter.* For we ſee a ſcion, or young ſlip grafted upon the trunk of a tree, to ſhoot forth more proſperouſly, than if it had been ſet in earth: And why, in like manner, ſhould not the ſeed of an Onion inſerted into the head of another Onion while it is green, germinate more happily than if it had been ſown in the bare earth? And here the *Root* is varied for the *Trunk*, that the thing may ſeem to be a kind of inſition in the root. *Secondly, the variation of an Experiment may be made in the efficient.* The *beams of the Sun* through burning-Glaſſes are ſo fortified, and intended to ſuch a degree of heat, that they are able to ſet on flame any matter, which is apt eaſily to conceive fire: Now whether *may the beams of the Moon*, by the ſame Glaſſes be actuated by ſome weak degrees of warmth; that we may ſee whether all heavenly Bodies be hot in power? So *bright and radiant heats* are exalted by Glaſſes: Whether are *gloomy and opaque heats* (as of ſtones and mettals, before they be made burning hot by the force of fire) ſubject to the ſame impreſſion, or are they rather in this ſome portions of light? So Amber, and Jet, or an Aggat chafed draw unto them ſtraw; whether warmed at the fire will they do the like? *Thirdly, the variation of an Experiment may be made in Quantity*, concerning which a very diligent care is to be taken, being it is encompaſſed with many errors. For men are of opinion *that if the Quantity be augmented and multiplied, the virtue is proportionably augmented and multiplied*; and this commonly is with them a Poſtulatum, and a ſuppoſed truth, as if the matter were a Mathematical certitude; which is utterly untrue. *A globe of Lead, or a pound in weight* let fall from a Tower, ſay, it deſcends to the earth in the ſpace of ten Pulſes; whether will *a Globe of two pound weight* (in which that force of Motion, which they call Natural, ſhould be doubled,) light upon the earth in the ſpace of five Pulſes? But that Globe ſhall come down almoſt in an equal ſpace of time with this, and ſhall not be accelerated according to the meaſure of *Quantity*. So (imagine,) one dragm of Sulphur mingled with half a pound of Steel, it will make it fluid and liquid; Will therefore an ounce of Sulphur ſuffice to the diſſolving of four pounds of Steel? But that follows not; *For it is certain that the obſtinacy of the matter in the Patient is more encreas'd by Quantity, than the Activity of the virtue in the Agent.* Beſides, too much, as well as too little fruſtrates the effect: For in the excoctions and depurations of Mettals it is a familiar error, that to advance excoction, they augment the heat of the Furnace, or the *Quantity of the Injection*; but if theſe exceed due proportion, they hinder the operation; becauſe through their force and acrimony, they turn much of the

the pure Metal into fumes, and carry it away; ſo as there is a loſs in the Mettal; and the maſs which remains through the emiſſion of the Spirits becomes more obſtinate and indurate. *Men ſhould* therefore remember the mockery of *Æſop's* houſwife, who conceited that by doubling her meaſure of Barley, her Hen would daily lay her two eggs: But the Hen grew fat and laid none. It is not altogether ſafe to rely upon any Natural experiment, before proof be made *both in a leyer, and greater Quantity.* Æſop: lib.

§ *Production of an Experiment is of two ſorts, Repetition and Extenſion; namely when the Experiment either is iterated; or driven to a kind of ſubtilty.* Example of *Repetition* may be this; *the ſpirit of wine* is made of wine once diſtilled, and it is much more quick and ſtrong than wine it ſelf; will likewiſe the ſpirit it ſelf of wine diſtilled, or ſublimated, proportionably exceed it ſelf in ſtrength? *But Repetition* alſo is not without deceit; for neither doth the ſecond exaltation equal the exceſs of the firſt; and many times by *iteration of the Experiment* after a certain ſtate, and height of operation, Nature is ſo far from a further progreſſion, as ſhe rather falls into a relapſe. Wherefore the *experiment* muſt be made with Caution and judgment. So *Quick-ſilver* in linen, or elſe in the midſt of moulten Lead when it begins to grow cold, the Quick-ſilver inſerted is ſtupified, and is no longer fluid; will the ſame *Quick-ſilver* if it be often ſo practis'd upon, become ſo fixt as to be made malleable? The example of extenſion may be this, *water placed upwards*, and made penſile; and by a long neb of a glaſs dipt in wine, mixt with water, will unmingle, the water from the wine, the wine leaſurely aſcending, and ſetling in the top; the water deſcending, and ſetling in the bottom: Now as wine and water which are two divers bodies are ſeparate by this device; may the more ſubtil parts of wine in like manner, which is an entire body, be ſeparate from the more groſs, that ſo there may be a diſtillation, as it were, by weight; and that there may be found floating in the top, a ſubſtance neareſt to the ſpirit of wine, but perchance more delicate? So the Load-ſtone draweth Iron ſolid, and entire, unto it; will a piece of a Load-ſtone, plunged into diſſolv'd parcels and fragments of Iron, allure the Iron unto it, and cover it ſelf with it? So *the verſor of a Mariners needle* applies it ſelf to the Poles of the world: Doth it do this after the ſame manner, and upon the ſame conſequence whereby Celeſtial Bodies move? Namely if you ſhould place the Needle in a contrary poſture, that is, in the South-point, and there ſtay it a while, and then ceaſe your forcing it, and leave it to it ſelf; would this *Needle* turn it ſelf perchance to the North; and chuſe rather to wheel about by the Weſt, into its deſired natural ſite, than by the Eaſt? *So gold imbibeth* Quick-ſilver which is contiguous to it; doth the gold ingulf, and ſuck up this Quick-ſilver into it ſelf without extenſion of its ſubſtance, that it becomes a Maſs more ponderous than gold it ſelf? *So ſome men ſubminiſter helps to their memories* by ſetting up Images and Pictures of Perſons in certain rooms; would they attain the ſame end if (ſetting aſide ſuch Images) they ſhould effigiate to themſelves an Idea of their geſts and habits. And thus much of the Poduction of an experiment.

§ *The tranſlation of an experiment is three-fold, either from Nature, or chance into Art; or from Art, or one Practice into another; or from*

a part of ſome Art, into a diverſe part of the ſame Art. Of Tranſlation from Nature, or chance into Art, there are innumerable examples; for that almoſt all Mechanical Arts owe their originals from ſlender beginnings preſented by *Nature* or *Chance.* It is a receiv'd Proverb, *That Grapes conſorted with Grapes ſooner come to maturity:* Which from the Nature of mutual aſſiſtance and friendſhip grew popular. But our makers of Syder, which is a wine of Apples, do well imitate this: For they provide that they be not ſtampt or preſt, before, by being caſt into heaps for a time; they mature by mutual contact; whereby the acidity and tartneſs of the liquor is corrected. So the *imitation of Artificial Rainbows* by the ſpiſs aſperſion of little drops, is by an eaſie derivation from natural Rain-bows compoſed of a dewy Cloud. *So the manner of diſtilling* might be taken either from above, as from ſhowers or dew; or from that homely experiment of Drops adhering to Covers put upon Pots of boyling water. *And a man would have been afraid to have imitated Thunder and Lightning, if the Pot-lid of that chymick Monk had not, by being toſt up into the air, inſtructed him.* But the more plentiful *this experiment* is of examples, the fewer we need to produce. And if men would be at leiſure to imploy their ſtudies in the inquiry of things profitable; they ſhould view attentively, by degrees and of ſet purpoſe all the workmanſhip, and the particular workings of Nature; and perpetually, and thoroughly meditate with themſelves, which of thoſe may be transfer'd to Arts, *For Nature is the Mirror of Art:* And the experiments are as many which may be *tranſlated from Art into Art; or from one Practice into another,* though this is not ſo much in uſe: For nature every way is obvious to all men; but Arts appropriate to particular Profeſſors, are only known to them. *Spectacles* are invented to help a weak ſight; might there be contrived an inſtrument which faſtned to the ear, might help ſuch as are thick of hearing? So *embalming, and honey conſerve dead Corps*; might not ſome of thoſe ingredients be transfer'd into a medicine, which might be uſeful to bodies alive? So the practice of Seals upon wax; cements for walls, and upon Lead is ancient; but this invention ſhewed the way to Impreſſion upon Paper, or the Art of Printing. *So in the Art of Cookery, ſalt ſeaſons fleſh,* and that better in Winter, than in Summer: Might not this be profitably tranſlated to Baths and their temperament, as occaſion ſhall require; either to impreſs ſome good moiſture, or extract ſome peccant humour. *So ſalt* in the new-found experiment of *Artificial Conglaciations* is found to have great power to condenſe: Might not this be transfer'd to the condenſation of Metals; ſeeing it is known long ſince that ſtrong-waters, being compoſited of ſome kinds of ſalts, have a power to deject and precipitate ſmall ſands of Gold out of certain Metals, not ſo denſe and compact as Gold? *So painting revives the memory of a thing, by the Image of a Picture:* Is not this traduced into an Art, which they call *the Art of Memory?* Let this in general ſerve for admonition; that nothing can ſo much conduce to the drawing down, as it were, from heaven, a whole ſhowr of new and profitable Inventions, as this, that the experiments of many Mechanick Arts, may come to the knowledge of one man, or ſome few, who by mutual conference may whet and ſharpen one another; that ſo by this, which we call *Tranſlation of Experiments,* Arts may nouriſh, and as

Pancirollus par. 2.

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it were, by a commixture, and communication of Rayes, inflame one the other. For although the rationall way by an artificial *Organum*, promiſe far greater matters; yet nevertheleſs this *ſagacity by literate experience*, may in the mean project and ſcatter to the benefit of man (as miſſive Donatives amongſt the Ancients) many rudiments to knowledge, which may be had at hand. *There remains the Tranſlation of a Part of Art into another part diverſe from it*, which little differs from the *Tranſlation of Art into Art:* But becauſe many *Arts* exerciſe great ſpaces, ſo as they may very well ſuſtain a *Tranſlation* within the limits of their own operations; we thought good to annex this kind of *Tranſlation*; ſpecially ſeeing it is in ſome Arts of very great import. For it maketh much to the advancement and amplification of the Art of Phyſick; if the *Experiments* of that part of Medicine *concerning the Cures of Diſeaſes*, be transfer'd to thoſe Parts concerning the *Regiment of Health*, and the *Prolongation of Life*. For if ſome excellent *Opiate* be of that force and virtue, as to repreſs and aſſwage the raging inflamation of the ſpirits, in a peſtilential Fever; let no man queſtion, but that a like receipt by a due proportioned Doſe made familiar, may in ſome degree put back and retard inflamation, which grows and creeps upon us by age. Thus much for the *Tranſlation of Experiments*.

§ *Inverſion of Experiment* is, when the contrary to that which is by *Experiment* manifeſt, is tried: For example, *Heat by Glaſſes is intended*; is cold ſo too? So *Heat* when it diffuſeth it ſelf is yet rather carried upwards: Is cold likewiſe in diffuſing it ſelf carried rather downwards? For inſtance, take a ſmall Bar of Iron, and heat it on one end, then ſet it upright, (that end which is heated placed downwards) laying your hand upon the end, it will preſently burn your hand; but now inverſe the Bar, placing the hot part upwards, and your hand upon the part which is downwards, and you ſhall not feel the heat ſo ſoon by many Pulſes: Whether or no, if the Bar was heated all over, and one end ſhould be moiſtned with ſnow, or with a ſponge dipt in cold water; if the ſnow or ſponge were applied to the part which is upward, would (I ſay) the cold ſooner pierce downward, than if the ſnow or ſponge placed at the lower end, the cold would ſhoot upward. *So the Beams of the Sun* rebound from a white upon a black are congregate: Whether are ſhadows alſo diſperſed upon white, and united upon black? The Experiment we ſee made in a dark room, the light being let in thorow a narrow chink only, where the Images of things which are without, are taken upon white Paper, not upon black. So a vein is opened in the fore-head for the Megrim, or Head-ach. Muſt alſo the Hemicrane be ſcarified for the *Soda*; or the pain of the head in general? So much for the *Inverſion of Experiment*.

§ *Compulſion of Experiment, is when Experiment is urged, and extended to annihilation, or privation of the vertue.* For in other kinds of hunting, the game is only taken, but in this kill'd. Example of *Compulſion* is this; *The Loadſtone draws Iron*, inforce therefore the Iron, or vex the Loadſtone, ſo as the virtue of attraction be ſtifled or expir'd: As, ſuppoſe the Loadſtone were burnt or macerate in ſtrong-waters, whether will it forego, or abate its virtue? Contrarywiſe, *if ſteel* or Iron be reduced into *Crocum Martis*, or into prepar'd ſteel, as they call it; or be diſſolved in *Aqua Fortis*; will the Loadſtone ſtill allure them?

Again,

Again, the Loadſtone draws Iron through all interpos'd Bodies that we know, as Gold; Silver; Glaſs, &c. Fix therefore ſome medium upon it (if it may be) that may intercept, and arreſt its virtue. Make a trial of Quickſilver; of Oyl; Gums; a burning coal; and the like, which yet have not been experimented. *So there have* been brought in of late *certain Perſpectives*, which multiply after a ſtrange manner the minuteſt viſibles: Preſs the uſe of them, either upon ſmall objects, as they may not be able to work upon; or upon ſo vaſt, as they may be confounded in working: As whether they can clearly diſcover thoſe moats in Urine, which otherways could not be diſcern'd? Whether in Iewels, every way pure and ſpotleſs, they can make the grains and imperceptible clouds to become viſible? *Whether* can they expoſe to view the moats in the Sun (which are untruly charged upon *Democritus* for his Atoms, and the Principles of Nature) as if they were great Bodies? Can they ſo diſtinguiſh to the ſight the groſſer duſt made of Ceruſs, and Vermilion, that the ſmall grains may appear; here the red, there the white? *Again, can* they multiply greater Figures (imagine a face; an eye, or ſo) to the ſame bigneſs they can a flea, or a little worm? *Can they* make a piece of Cypreſs, or Cobweb-Lawn appear ſo full of holes, as if it were a Net? *But we ſtay* the leſs upon the *Compulſions of Experiments* becauſe commonly they fall not within the limits of literate experience; but are rather referr'd to *Cauſes*; and *Axioms*; and the *New Organum*. For whereſoever there is a Negative; Privative; or excluſive faculty; there is already ſome light given to the *Invention of Forms*. Thus far of the *Compulſion of Experiment*.

Hippoc. Epiſt. Laert. in vit. Plin. Lib. 30.

§ *Application of Experiment is nothing elſe than a witty Tranſlation of it to ſome other profitable Experiment.* Example may be this; All Bodies have their own dimenſions, and their own weights: Gold is of greater weight, of leſs dimenſion, than Silver; Water than Wine. From this is traduced a profitable Experiment; that from a juſt weight and meaſure being taken, you may know how much Silver hath been mixt with Gold; how much Water with Wine; which was that celebrated Ἔυρηκα of *Archimedes*. So fleſh ſooner putrifies in ſome Cellars, than it doth in others. It will be of uſe to make application of this *Experiment* to the finding out of Airs, more or leſs healthful, for habitation; namely, there where fleſh is longeſt preſerv'd from putrefaction. The ſame may be applied to the diſcovery of healthful, or peſtilential ſeaſons of the year. *But there* are innumerable examples of this Nature: Only let men awake, and perpetually fix their eyes, one while, on the nature of things; another while, on the application of them to the uſe and ſervice of mankind. So much concerning the *Application of the Experiment*.

§ *Copulation of Experiment is the Links and Chain of Application; when as things, ſingle, and ſeparate had been to little uſe, are, (connexed) of force and efficacy.* For example, you deſire to have late Roſes or fruit; this is effected if you pull off the more early buds when they are newly knotted; the ſame is done, if you lay the roots bare until the ſpring be well come on, and expoſe them unto the open Air; but it will take the better, if you joyn both theſe practices of putting back germination. So Ice and Nitre do much conduce to refrigeration;

tion; but commixt, together much more. But this experiment is clear of it self, notwithstanding here may covertly a fallacy lie hid, (as there may in all other effects, and conclusions where Axioms are wanting) if the *Copulation* be made of things which work after a different, and as it were, repugnant manner. And so much for *Copulation of Experiment.*

§ *There remain the Chances, or Fortunes of Experiment. This is altogether an irrational, and as it were, a passionate manner of experimenting, when you have a mind to try a conclusion not for that any reason, or other Experiment inducеth you to it; but only because the like was never attempted before.* Yet I do not know whether or no, in this kind, there may not lie hid some secret of great use, if you try Nature every way. *For the* wonders of Nature commonly lie out of the high road, and beaten paths; so as the very absurdity of an attempt may sometimes be prosperous. But if reason go along with this practice; that is, that it is evident that such an Experiment was never yet tried; and yet there is great reason why it should be attempted; then it is a choice *Experiment*, and searcheth the very bosom of Nature. *For Example:* In the operation of Fire upon some Natural Body, one or other of these effects hitherto ever comes to pass; as that either something flies out, (as flame and fume in ordinary burning fewel) or at least there is made a local separation of Parts, and that for some distance; as in Distillation where the Lees settle, the vapours, after they have play'd about, are gathered into receptacles: But no man ever yet made trial of an imprison'd Distillation, for so we may call it: And it seems very probable, that if the force of heat immur'd with in the Cloisters of a Body, do so great matters, and work such alterations; and yet without loss, or manumission to the Body; that then this Proteus of Matter, fetter'd, as it were, with Manacles, may in time be forced to many transformations, if so be, that the heat be so temper'd; and intermutually chang'd, that the vessels be not broken. *For this* operation is like that of the womb, where the heat works without emission, or separation of any part of the Body, save that in the Matrix, there is conjoyn'd Alimentation; but for version, the thing is the same. These are the *fortunes, or adventures of Experiment. In the mean time*, we give this advice, touching Experiments of this Nature; that no man be discouraged, or confounded, if the *Experiments* which he puts in practice answer not his expectation; *For what succeeds pleaseth more; but what succeeds not, many times informs no less.* And this ought ever to be remembred (which we often press) *that Experimenta Lucifera Experiments of Light, and discovery, ought for a time to be much more enquired after, than Experimenta fructifera, Experiments of use and practice.* And thus much of *Literate Experience*, which (as we have said before) is rather a sagacity, and a hunting scent, than a Science.

§ *Now for the Novum Organum*, we say nothing, nor give any foretast thereof; being we have projected in our minds, by the assistance of the Divine favour, to make a perfect entire work of that subject; seeing it is a matter of higher consequence, than all the rest.

CAP.

Chap. III.

I The Partition *of the Inventive Art of Arguments, into Promptuary, or Places of Preparation; and Topick, or Places of Suggestion.* II. The Division *of Topick Art into General.* §. *And Particular Topicks.* III. In example *of Particular Topick in the Enquiry De* Gravi & Levi.

Invention of Arguments is not properly an Invention; for to Invent is to discover things unknown, and not to recover, or recall that which is known already. The Use and Office of this kind of Invention seems to be no other, than out of the Mass of Knowledge, congested, and stored up in the Mind, readily to produce, that which may be pertinent to the Matter, and Question propounded. For he that is little or nothing acquainted before hand with the Subject in question, *Topicks of Invention* will little advantage him: On the contrary he that hath Provision at home which may be applied to the purpose, even without *Art* and *Places of Invention*, will at length, (though not so readily and aptly) find out and produce Arguments. *So that this kind of Invention (as we have said) is not properly Invention, but only a Reduction into Memory, or Suggestion with Application.* But because custom and consent hath authoriz'd the word, it may in some sort be called *Invention: For it* may be as well accompted a chase, or finding of a Deer, which is made within an inclosed Park; as that within a Forrest at large. But setting aside curiosity of words it may appear that the scope and end of this kind of *Invention*, is a certain promptitude, and expedite use of our Knowledge, rather than any encrease, or Amplification thereof.

I *To procure this ready Provision for discourse, there are two ways; either that it may be designed and pointed out, as it were, by an Index, under what Heads the matter is to be sought; and this is that we call Topick: Or else, that Arguments may be before hand framed, and stored up, about such things as are frequently incident, and come into disceptation; and this we will call promptuary Art, or of Preparation.* This later scarcely deserveth to be called a *Part of Knowledge*, seeing it rather consisteth in diligence, than any artificial erudition. And in this part *Aristotle* doth wittily indeed, but hurtfully deride the Sophists near his time, saying; *They did as if one, that professed the Art of shoo-making, should not teach how to make up a shooe; but only exhibit in a readiness a number of shooes, of all fashions and sizes.* But yet a man might here reply, that if a Shoomaker should have no shooes in his shop, but only work as he is bespoken, he would be but a poor man, and weakly customed. But our Saviour speaking of Divine knowledge, saith far otherwise; *Every Scribe instructed for the Kingdom of heaven; is like a good housholder that bringeth forth both new and old store.* And we see the ancient Writers of Rhetorick do give it in Precept, *That Pleaders should have divers common Places prepared long before hand, and handled*, and illustrated both ways; for example, for the sence and equity of Law against the words, and letter of Law; and on the contrary. And *Cicero* himself being broken

De Repr. Soph. lib. 2. c. 9. §. ult.

Mat. 13.

Cic. de Orat.

broken unto it by great experience, delivers it plainly; *That an Orator if he be diligent and sedulous, may have in effect premeditate, and handled, whatsoever a man shall have occasion to speak of*; so that in the Pleading of the Cause it self he shall have no need to insert any new or sudden matter, besides new names, and some individual Circumstances. *But* the pains and diligence of *Demosthenes* went so far, that in regard of the great force that the entrance and access into a Cause hath to make a good Impression upon the Minds of Auditors, he thought it worth his labour to frame, and to have in readiness a number of *Prefaces* for Orations and Speeches. And these Presidents, and Authorities, may deservedly overweigh *Aristotle's* Opinion, that would advise *us to change a Wardrope for a pair of Shears.* Therefore this part of knowledge touching *Promptuary Preparation*, was not to be omitted; whereof for this place this is sufficient. And seeing it is common to both *Logick* and *Rhetorick*, we thought good here amongst *Logicks*, only in Passage, to touch it; referring over a more ample handling of it to *Rhetorick*.

Ad Attic. Lib. XVI. EP. VI.

Ejus 45 Exordia, si ejus.

II The other Part of *Invention, which is Topick, we will divide into General and Particular Topick.* General *is that which is diligently and copiously handled in Logick, or rational knowledge*; as it were needless to stay upon the explication thereof. Yet thus much we thought meet to admonish by the way; that this *Topick* is of use, not only in argumentations, when we come to dispute with another; but in meditations also, when we reason and debate matters within our selves. Neither do these places serve only for *suggestion*, or *admonition*, what we ought to *affirm* or *assert*; but also what we ought to *enquire* and *demand.* And a faculty of wise interrogating, is half a knowledge; for *Plato* saith well, *Whosoever seeks, comprehends that he seeks for, in general notion; else how shall he know it, when he hath found it? And therefore the larger and more certain our anticipation is, the more direct and compendious is our search.* The same places therefore, which will conduce to search the mind of our inward conceptions, and understanding; and to draw forth the knowledge there stored up; will also help us to produce knowledge from without. So as if a man of Learning, and understanding be in presence, we might be able, aptly and wisely to propound a Question thereof; and likewise profitably select and peruse Authors and Books, or parts of Books, which might teach and inform us of those points we enquire.

In Menone.

§ *But particular Topicks do much more conduce to the purpose we speak of; and is to be accompted a thing of far greater use.* There hath been indeed some slight mention made hereof, by some Writers; but it hath not yet been handled fully, and according to the dignity of the Subject. But to let pass that humour and pride, which hath reigned too long in Schools, which is, *to pursue with infinite subtilty, things that are within their command; but never to touch at things any whit removed*; we do receive and imbrace *particular Topick*, as a matter of great use, that is, *places of enquiry and invention, appropriate to particular Subjects and Sciences*; and these *places are certain mixtures of Logick, and the proper matter of particular Sciences.* For he is but a weak man, and of narrow capacity, who conceives that the Art of *finding out Sciences* may be found out, propounded and perfected at once, even in their first conception;

* TOPICÆ PARTICULARES.

and preſently be ſet down, and practiſed in ſome work. But let men know for certain, *That ſolid and true Arts of Invention do ſhoot up, and come to maturity with the Inventions themſelves: So as when a man firſt enters upon the ſearch of a knowledge, he may have many profitable Precepts of Invention; but after he hath made farther progreſs in the knowledge it ſelf, he may, and muſt excogitate new Precepts of Invention, which may, lead him more proſperouſly to further Diſcoveries.* For this kind of purſuit is like a going upon a plain and open Champion; for after we have gone a part of the way, we have not only gained this, that we are now nearer to our journeys end; but we gain the better ſight of that part of the way, which remains. So every degree of *proceeding in Sciences*, having paſt over that which is left behind, gives a better proſpect to that which follows: And becauſe we ſet down this part of Topick as *Deficient*, we will annex an example thereof.

III. *A particular Topick*, or the Articles of Enquiry *de* GRAVI & LEVI.

LEt it be enquired what Bodies thoſe are which are ſuſceptible of the *Motion of Gravity*, *what of Levity*, and whether there be any of a middle and indifferent Nature?

2. *After an abſolute Inquiry de Gravi & Levi*; proceed to *comparative Inquiry*; as of *Ponderous Bodies*, which doth *weigh* more, which leſs, in the ſame demenſion? ſo of *Light Bodies*, which are more ſpeedily carried upward, which more ſlowly?

3. *Let it be enquired*, what the *Quantum* of a Body may contribute, and effect towards the *Motion of Gravity*. But this, at firſt ſight, may ſeem a ſuperfluous *Inquiry*, becauſe the computation of motion muſt follow the *computation of quantity*: But the matter is otherwiſe; for although the *quantity* in the ſcales do compenſate the *weight* of the Body it ſelf, (the force of the Body every way meeting by repercuſſion, or by reſiſtance, of the Baſins, or of the Beam) yet where there is but ſmall reſiſtance (as in the falling down of a Body through the Air) the *quantity* of a Body little avails to the *incitation of the deſcent*; ſeeing two Balls of Lead, one of *twenty*, *the other* of one *pound weight*, fall to the earth almoſt in an equal ſpace of time.

4. *Let it be inquired*, whether the *Quantity* of a Body may be ſo increaſed, as that the *Motion of Gravity* may be utterly depoſed and caſt off; as in the Globe of the earth, which is penſil, and falls not? Whether may there be other maſſive ſubſtances, ſo great, as may ſuſtain themſelves? *For Local Deſcent to the Centre of the Earth, is a meer fiction*; and every great Maſs abhorrs all Local Motion, unleſs it be overrul'd by another more predominant Appetite.

V. DIGRES.

5 *Let it be inquired*, what the *reſiſtance* of a *Body interpoſing*, or *incountring* may do, or actuate towards the managing of the *Motion of Gravity*: For a Body deſcending, either *penetrates* and cutteth the Body occurrent; or is arreſted by it: If it *penetrates*, then there is *penetration*; or with weaker reſiſtence, as in Air, or with more ſtrong, as in Water: If it be *ſtaid*, it is ſtaid either by a reſiſtance *unequal*, where there is a *Pregravation*; as if Wood ſhould be put upon Wax; or *equal*, as if Water ſhould be put upon Water, or Wood upon Wood of the

the ſame kind: which the Schools, in a vain apprehenſion call the *non-Ponderation of a body within its own Sphere.* All theſe do vary the *Motion of Gravity*; for *heavy ſubſtances* are otherways moved in ſcales, otherwiſe in falling down; nay, otherwiſe (which may ſeem ſtrange) in Ballances hanging in the Air, otherwiſe in Ballances immerſed in Water; otherwiſe in falling down through Water, otherwiſe in ſwimming, or tranſportation upon Water.

6. *Let it be inquired*, what the *Figure* of a body deſcending may, or doth work, to the moderating of the *Motion of Gravity*, as a broad *Figure* with tenuity; a cubick *Figure*, long round, Pyramidal; when they turn; when they remain in the ſame poſture, wherein they were deliver'd.

7. *Let inquiry be made*, of that which the *Continuance* and *Progreſſion* of a *Fall* or *Deſcent*, may, and doth work to this effect, that it may be carried with a greater incitation and force; and with what proportion, and how far that Incitation will carry? For the Ancients, upon a ſlight contemplation, were of opinion, *that becauſe that was a natural Motion, it would continually be augmented and improv'd.* v. Digres.

8. Let *inquiry* be made of that which *Diſtance* and *Proximity of a Body deſcending from the earth*, may, and doth work to this end, that it may fall more ſpeedily, more ſlowly, or elſe not at all, (if ſo be that it be without the Orb of Activity of the *terrene Globe*, which was *Gilbert's* opinion): as likewiſe what the *immerſion of a Body deſcending more in the deep of the earth*; or the placing thereof *nearer to the ſuperficies of the earth*, may produce? For theſe kinds of Poſitures vary the Motion, as they experience that work in Mines. De Magn.

9. *Let there be inquiry made* of that which the difference of Bodies, by which motion of Gravity is diffuſed, and communicated, can do and doth: And whether it may equally be communicated by Bodies ſoft, and poroſe; as by hard and ſolid: As if the Beam of the Ballance be on one ſide of the Tongue Wood, on the other ſide Silver, (though they be reduced to the ſame weight) whether doth it not beget a variation in the Scales? In like manner, whether Metal put upon Wool, or upon a blown Bladder, weigh the ſame, it would do, if laid in the bottom of the Scale?

10. *Let there be inquiry made* what the diſtance of a Body from the level-Poiſe; that is the quick, or late perception of the incumbent, or of depreſſion, can do or doth: As in a Ballance where one part of the Beam is longer (though of the ſame weight) whether this doth ſway the Ballance? Or in the crooked Pipes, where certainly the longer part will draw the Water, although the ſhorter part, made more capacious, may contain a greater weight of Water.

11. *Let there be Enquiry made* of that which the intermixtion or copulation of a light Body with a weighty, may do to the raiſing of the *weight* of a Body, as in the poiſe of living Creatures, and Dead?

12. *Let inquiry be made* of the ſecret aſcenſions, and deſcenſions of the parts more light, and more weighty in one, and the ſame entire Body. Whereby there may be made oftentimes exact ſeparations; as in the ſeparation of Wine and Water; in the Aſcenſion of the Flower of Milk, and the like.

13. *Let it be inquired* what is the line and direction of the Motion of Gravity; and how far it may follow either the centre of the earth, that is, the mass of the Earth, or the centre of the Body it self; that is, the contention and driving on of the parts thereof; for those centres are profitable in demonstration, but of no use in Nature.

14. *Let it be inquired* touching the comparison of the Motion of Gravity, with other Motions; what Motions it masters, to what it yields? As in the Motion, which they call, *violent*, which is repress and bridled for a time; as when a far greater weight of Iron is drawn up by a small Load-stone, the Motion of *Gravity* gives place to the Motion of *Sympathy*.

15. *Let inquiry be made of the Motion of Air*, whether it be carried upwards, or be collateral and indifferent? Which is a hard thing to find out, but by some exquisite Experiments: for the glittering apparition of Air in the bottom of Water, is rather by the Percussion of Water, than by the Motion of Air; being the same emication may be made in Wood. But Air mingled with Air discovers no *Experiment*; because Air in Air exhibits Levity no less, than Water in Water doth Gravity: But in a Bubble drawn over with the inclosure of a thin Skin, it stays for a time.

16. *Let it be inquired what is the Term of Levity*, for sure their meaning (who made the Centre of the Earth, the Centre of *Gravity*) is not, that the ultimate convexity of Heaven should be the stint and limits of *Levity:* Or rather, that as ponderous Bodies seem to be so far carried, that there they may cast Anchor as at a fixt Pillar; so light Bodies are so far carried, that they may begin to wheel about, and come to a *motion without termination?*

17. *Let inquiry be made*, why vapours and exhalations should be carried as high as the *middle Region* of the Air (as they call it); seeing they are somewhat a gross substance; and the beams of the Sun by turns (as in the night) cease their Operation.

18. *Let inquiry be made of the conduct of the Motion of Flame upwards*; which is the more abstruse, because *Flame* exspires every moment; save perchance in the imbracement of greater *Flames:* For *Flames* separated and broken off from their continuation, last not long.

19. *Let inquiry be made of the ascendant Motion of the Activity of Heat*, as when the Heat of red-hot Iron affecteth rather to mount upwards, than to move downwards? *The example* therefore of *particular Topick* may be made in this manner; in the mean time, what we have begun to advise, we do again admonish, which is, that men vary their *particular Topicks* so, as after farther Progression made by *Inquiry*, they do substitute one, and after that another *Topick*, if ever they desire to reach the top of Sciences. As for us, we attribute so much to *particular Topicks*, as we do design to make a particular Work of them upon some Subjects in Nature, which are more observable, and more obscure, *For we are Commanders of Questions, not so of things.* And thus of *Invention.*

CHAP.

CHAP. IV.

I. The Partition *of the Art of Judging, into Judgement by Induction,* § *And by Syllogiſm. Of the firſt a Collection is made in the New Organ.* § The firſt Partition *of Judgement by Syllogiſm into Reduction, Direct, and Inverſt.* § The ſecond Partition thereof, *into Analytick Art: and the Knowledge of Elenchs.* II. The Diviſion of the *Knowledge of Elenchs, into Elenchs of Sophiſms.* § *Into Elenchs of Interpretation of Terms.* § *And into Elenchs of Images, or Idolaes.* III. The Diviſion *of Idolaes.* § *Into Impreſſions from the General Nature of Man, or* Idola Tribûs. § *Into Impreſſions from the Individual temper of particulars, or* Idola Specûs. § *Into Impreſſions by Words, and Communicative Nature, or* Idola Fori. IV. An Appendix *of the Art of Judging, namely of the Analogie of* Demonſtration *according to the Nature of the Subject.*

I. LET us now paſs to *Judgement, or the Art of Judging, which handleth the Nature of Proofs, or Demonſtrations.* And in this *Art of Judging* (as alſo generally it is accepted) *a Concluſion is inferred, either by Induction; or elſe by Syllogiſm:* For *Enthymemes,* and *Examples* are only the abridgements of theſe two. *As for Judgement* that it is by *Induction,* we need nothing doubt. *For by one and the ſame Operation of the Mind, that which is ſought, is both found and judged.* Neither is the thing perfected by any mean, but immediately after the ſame manner, for moſt part, as it is in *Senſe:* For *Senſe,* in her primary Objects, doth at once ſeize upon the ſpecies of an Object, and conſent to the truth thereof. *But it is otherwiſe in Syllogiſm,* the Proof whereof is not *Immediate,* but perfected by a *Mean*; and therefore *the Invention of the Medium is one thing; and the Judgement of the conſequence of Argument, is another: For the mind firſt diſcourſeth, afterwards reſts ſatisfied.* But a *Vitious Form of Induction* we utterly diſclaim; a *Legitimate Form* we refer over to the *New Organ.* Therefore enough in this place, of *Judgement by Induction.*

§ For that other *Judgement by Syllogiſm,* to what purpoſe is it to ſpeak, ſeeing this is by the ſubtil files off mens wits amoſt worn away, and reduced into many minute pieces? And no marvel, being it is a thing hath ſuch Sympathy with mans underſtanding. *For the mind of man doth wonderfully endeavour, and extremely covet this, that it may not be penſil; but that it may light upon ſomething fixt and immoveable, on which as on a firmament it may ſupport it ſelf, in its ſwift motions and diſquiſitions.* Surely, as *Ariſtotle* endeavoureth to prove, *That in all motion of Bodies there is ſome point quieſcent; and very elegantly expoundeth the Ancient Fable of* Atlas *that ſtood fixed, and bare up the Heavens from falling, to be meant of the Poles of the World, whereupon the Converſion is accompliſht. In like manner men do earneſtly ſeek to have ſome* Atlas, *or Axeltree of their Cogitations within themſelves, which may in* De Animal. Motione.

ſome

ſome meaſure moderate the fluctuations, and wheelings of the underſtanding, fearing it may be, the falling of their Heaven. Therefore *men have haſtned too faſt to ſet down principles of Sciences, about which all the variety of Diſputations might turn without peril of ruine or ſubverſion. In truth not knowing that he who too early lays hold on certainties, will conclude in ambiguities; and he that ſeaſonably ſuſpends his Judgement, ſhall attain to Certainties.*

§ So then it is manifeſt, that this *Art of Judging by Syllogiſm* is nothing elſe, but the reduction of Propoſitions to Principles, by middle terms; and Principles are underſtood to be agreed of by all, and are exempt from Argument. But the invention of middle terms is permitted to the free ſagacity, and purſuit of mens wits. This *Reduction is of two kinds, Direct and Inverted. Direct* is, when the Propoſition is reduced to the Principle, which is call'd *Probation Oſtenſive. Inverſed* is, when the Contradictory of the Propoſition is reduced to the Contradictory of the Principle; which they term a *Probation from incongruity, or an abſurdity.* The number alſo of middle terms, or their ſcale is diminiſhed or increaſed, as they are remov'd from the Principle of the Propoſition.

§ *Theſe grounds laid, we will divide the Art of Judgement* (as for moſt part generally it is) *into Analytick Art; and the Doctrine of Elenchs;* the one giveth Direction, the other Caution. *For Analytick* ſetteth down the true Forms of Conſequences of Argument by a Variation, and Deflection, from which, the Concluſion is deprehended to be erroneous; and this part contains in it a kind of *Elench*, or Redargution. For, as it is ſaid, *Rectum & ſui index eſt, & obliqui.* Notwithſtanding it is the ſafeſt way to ſet down *Elenchs* as Monitors, whereby *Fallacies*, which otherwiſe might inſnare the Judgement, may be more eaſily detected. *In the Analytick* Part we find nothing *Deficient*, which rather is loaden with ſuperfluities, than any way is wanting in acceſſions.

V. Euclid. & Comment.

II. *The Knowledge of Elenchs* we divide into three Parts: *Elenchs of Sophiſms; Elenchs of Intepretation;* and *Elenchs of Images or Idolaes.* The Doctrine of *Elenchs of Sophiſms* is very uſeful; for although the the more groſs ſort of *Fallacies* is (as *Seneca* makes the compariſon very well) *But as the feats of Juglers, which though we know not how they are done; yet we know well it is not as it ſeems to be.* Yet the more ſubtil ſort of *Sophiſms* doth not only put a man beſides his anſwer, but doth in good earneſt abuſe his Judgement.

Epiſt. 45.

§ *This Part concerning the Elenchs of Sophiſms* is excellently handled by *Ariſtotle* in *Precept;* but more excellently by *Plato* in Example, not only in the Perſon of the Ancient Sophiſts, *Gorgias, Hippias, Protagoras* and *Euthidemus*, and the reſt; but even in the Perſon of *Socrates* himſelf, who profeſſing to affirm nothing, but to infirm whatſoever others avouch, hath exactly expreſſed all the Forms of *Objections, Fallacies* and *Redargutions.* Wherefore in this Part we have nothing *Deficient.* But this, in the mean time, is to be noted, that though we make the ingenuous and principal uſe of this Knowledge to conſiſt in this, *That Sophiſms may be redargued; yet it is manifeſt, that the degenerate and corrupt uſe thereof is imploy'd to contrive, and impoſe Captions and Contradictions, by theſe Sophiſms; which paſſeth for a great Faculty,*

In Dial. ità inſcript.

and

and no doubt is of great advantage. Though the difference was elegantly made by one betwixt an Orator, and a Sophiſt, *That the one is as the Grey-hound, which hath his advantage in the race; the other as the Hare which hath her advantage in the turn.*

§ Now follow *Elenchi Hermeniæ*, for ſo we will call them, borrowing the Word, rather than the Sence, from *Ariſtotle*. And here let us call to mens memory what we have ſaid before; (when we handled *Primitive Philoſophy*) of *tranſcendent, and adventitious Conditions, or Adjuncts of Entity*, they be *Majority, Minority; Much, Little; Priority, Poſteriority; Identity, Diverſity;* Power, *Act; Habit, Privation; Totality*, Partiality; *Activity*, Paſſivity; *Motion, Quietude; Entity, Non-Entity*, and the like. But ſpecially let men remember, and obſerve the different Contemplations of theſe Properties, which is, that they may be enquired, either *Phyſically*, or *Logically*. The Phyſical handling of theſe adherent Qualities we have aſſigned to *Primitive Philoſophy*. The *Logical* remaineth, and that is the very thing which we here ſtile *Doctrinam de Elenchis Hermeniæ*, the *Knowledge of the Elenchs of Interpretation*. This indeed is a ſound and material Portion of Knowledge: *For theſe Commune and general Notions have this Nature, that in all diſputations they every where intervene, ſo as, if they be not by a careful Judgment accurately diſtinguiſht at firſt; they may wonderfully overcloud the whole light of Diſputations; and even bring the caſe to that paſs, that the Diſputations ſhall be reſolved into a skirmiſh of words. For Æquivocations, and erronious acception of words* (ſpecially of this Nature) *are the Sophiſm, of Sophiſms.* Wherefore it ſeemeth better to conſtitute a Treatiſe of them apart, than to receive them into *Prime Philoſophy*, I mean *Metaphyſick*; or to annex them as a part of *Analyticks, which* Ariſtotle *very confuſedly hath done.* And we have given it a name from the Nature and Uſe; *for the right uſe is plainly Redargution, and Caution about the acception of words.* Nay that Part of *Predicaments* touching Cautions, of not confounding, aud tranſpoſing the terms of *Definitions*, and *Diviſions*, if it were rightly inſtituted, would be of ſingular uſe, in our judgment, and might fitly be referred hither. And thus much of the *Elenchs of Interpretation.* Ariſt. Analyt.

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ELENCHI IDOLORUM.

III *As for the Elenchs of Images or Idolaes; certainly Idolaes are the profoundeſt Fallacies of the mind of man.* Nor do they deceive in *Particulars*, as the reſt do; caſting a Cloud, and ſpreading ſnares over the Judgment; but apertly from a corrupt, and crookedly-ſet prediſpoſition of the mind; which doth, as it were, wreſt and infect all the anticipations of the underſtanding. *For the mind of man* (drawn over, and clouded with the fable Pavillion of the Body) is ſo far from being like a ſmooth, equal, and clear Glaſs, which might ſincerely take and reflect the beams of things, according to their true incidence; that it is rather like an inchanted Glaſs, full of Superſtitions; Apparitions, and Impoſtures.

§ *Idolaes are impoſed upon the underſtanding, either by the univerſal Nature of man in general; or from the individual Nature of Particulars; or by words, or nature Communicative.* The firſt ſort of Images we wont to call *Idola Tribûs*; the ſecond, *Idola Specûs*; the third, *Idola Fori:* There is alſo a fourth kind, which we call, *Idola Theatri*; *and is introduced by depraved Theories or Philoſophies, and perverſe Laws of Demonſtrations*; NOV. OR. Lib. I. APH. LXI. ad LXIX.

tions; but this kind may be denied and put off, wherefore we pass it over for the present. But the other do plainly besiege the mind, nor can they ever be quite removed, or extirpated. Therefore let none expect any Analytick Art in these; but the knowledge of *Elenchs* concerning these *Idolaes* is a Primary Knowledge. Nor (to speak truth) can this Knowledge of *Idolaes* be reduced into Art; but only by a contemplative wisdom, we may be instructed to beware of them. As for a just and more subtile Treatise thereof, we refer that to the *Novum Organum*, touching upon them in a generality in this place.

NOV. OR. Lib. I. Aph. XLV. ad LIII. exclusive.

§ *Idola Tribûs* is thus exemplified, *The Nature of the mind of man is more affected with Affirmatives and Actives, than with Negatives and Privatives; whereas in a just and regular course it should present it self equal to both.* But the mind of man, if a thing have once been existent, and and held good, receives a deeper Impression thereof, than if the same thing, far more often fail'd and fell out otherwise; which is the root, as it were, of all superstition and vain credulity. *So that he* answered well to him that shewed him the great number of Pictures of such as had 'scaped Shipwrack, and had paid their vows; and being prest with this Interrogative, *Whether he did not now confess the Divinity of Neptune?* return'd this counter-question by way of answer; *yea, but where are they painted, that are drowned?* And there is the same reason of all such like Superstitions, as in Astrology; Dreams; Divinations, and the rest. An *other Instance* is this; *The Spirit of man being it self of an equal and uniform Substance, doth presuppose, and feign a greater equality, and uniformity in Nature, than in truth there is.* Hence that fiction of the Mathematicians, *that in the heavenly Bodies, all is moved by perfect Circles*; rejecting spiral Lines: so it comes to pass, that whereas there are many things in Nature, as it were *Monodica*, and full of imparity; yet the conceits of men still feign and frame unto themselves, *Relatives; Parallels, and Conjugates.* For upon this ground, *the Element of Fire and its Orb is brought in to keep square with the other three, Earth; Water; Air.* The *Chymicks* have set out a Phanatical Squadron of the word, feigning by a most vain conceit, in those their four Elements (*Heaven; Air; Water*, and *Earth*, there are found to every one parallel and conform species. *The third Example* hath some affinity with the former, *That man is, as it were, the common measure and mirror, or glass of Nature*; for it is not credible (if all Particulars were scann'd and noted) what a troop of *Fictions* and *Idolaes* the reduction of the operations of Nature, to the similitude of humane Actions, hath brought into *Philosophy*; I say this very fancy, *that it should be thought that Nature doth the same things that man doth.* Neither are these much better than the Heresie of the *Anthropomorphites*, bred in the Cells and solitude of gross and ignorant Monks, or the Opinion of *Epicurus* answerable to the same in Heathenism, who supposed God to be of Humane shape. But *Velleius* the Epicurean needed not to have asked, why God should have adorned the heavens with stars and lights, as if he had been an *Ædilis*; one that should have set forth some magnificent shews or plays; for if that great Workman had conform'd himself to the imitation of an *Ædilis*, he would have cast the stars into some pleasant and beautiful works, and orders, like the curious roofs of Palaces, whereas one can scarce find in such an infinite number of stars a Posture in square, or Triangle,

Cic. de N. D. lib. V.

V. DIGRES.

Elem. Ignis vide Digress.

Paracel. Fludde passim.

Epiphan. lib. 3. Niceph. Hist. Eccl. lib. 11

or

or right-Line. *So different a harmony there is between the Spirit of man, and the Spirit of the world.*

§ *Idola Specûs are derived from the Individual Complexion of every Particular in respect of Mind, and of Body; as also, from Education; Custom; and Fortuitous Events*, which befall every man. For it is an excellent emblem that of *Plato's Cave*; for certainly (to let go the exquisite subtilty of that Parable) if a man were continued from his Childhood unto mature Age in a Grot, or a dark and subterraneous Cave, and then should come suddenly abroad, and should behold this stately canopy of heaven, and the Furniture of the World; without doubt he would have many strange and absurd imaginations come into his mind, and people his brain. So in like manner we live in the view of heaven; yet our Spirits are inclosed in the Caves of our Bodies; Complexions, and Customs, which must needs minister unto us infinite images of errors, and vain Opinions, if they do so seldom, and for so short a space appear above ground, out of their holes; and do not continually live under the Contemplation of Nature, as in the open Air. That Parable of *Heraclitus* doth well suit with this emblem of *Plato's Cave, that men seek Sciences in their own proper World, and not in the greater World.*

NOV. OR. Lib. I. Aph. III. ad LIX.

Plat. de Rep. VII.

N. L.

§ But *Idola Fori are most troublesome, which out of a tacite stipulation amongst men, touching the imposition of words, and names, have insinuated themselves into the understanding.* Words commonly are imposed according to the capacity of the People; and distinguish things by such differences, as the Vulgar are capable of; and when a more prescissive conception, and a more diligent observation would discern, and separate things better; the noise of popular words confounds and interrupts them. And that which is the remedy to this inconvenience (namely *Definitions*) in many points is not a remedy sufficient for the disease; because the *Definitions* themselves consist of words, and words beget words. For although we presume that we are masters of our words, and expressions; and it is soon said, *loquendum ut vulgus, sentiendum ut sapientes*, and that words of Art, which are of Authority only with the Learn'd, may seem to give some satisfaction to this defect; and that the *Definitions* whereof we have spoken, premised, and presupposed in Arts according to the wisdom of the Mathematicians, may be of force to correct the depraved acceptations of words; yet all this secures us not from the cheating slights and charms of words, which many ways abuse us, and offer violence to the understanding; and after the manner of the Tartars Bow, do shoot back upon the judgment from whence they came. Wherefore this disease must have a new kind of remedy, and of more efficacy. But we do now touch these in passage briefly, in the mean time reporting this Knowledge which we will call, *the Great Elenchs*, or the Doctrine of *Idolaes, Native* and adventual of the mind of man, to be *Deficient.* But we refer a just Treatise thereof to the *Novum Organum.*

NOV. OR. Lib. I. Aph. LIX. ad LXI.

Agell. N. H. alicubi.

IV. There remains one part of *Judgment* of great excellency, which likewise we set down as *Deficient.* For indeed *Aristotle* noteth the thing, but no where pursueth the manner of acquiring it. The Subject of this point is this. *The different kind of Demonstrations, and Proofs, to different kind of Matter and Subjects*; so that this Doctrine containeth the

DE ANALOGIA DEMONSTRATIONUM.

Indications of *Indications*. For *Ariſtotle* adviſeth well, *That we may not require Demonſtrations from Orators, or Perſwaſions from Mathematicians*; ſo that if you miſtake in the kind of Proof, the judicature cannot be upright and perfect. And ſeeing there are four kinds of *Demonſtrations* either by *immediate Conſent, and commune Notions*; or by *Induction*; or by *Syllogiſm*; or by that which *Ariſtotle* calls *Demonſtration in orb, or in Circle*, (that is not from the more known notions, but down right); every of theſe *Demonſtrations* hath certain Subjects, and matter of Sciences, wherein reſpectively they have chiefeſt uſe; other Subjects from which reſpectively they ought to be excluded. *For a rigor and curioſity in requiring too ſevere proofs in ſome things; much more a facility and remiſſion in reſting ſatisfied in ſlighter Proofs, are to be numbred amongſt thoſe prejudices, which have been the greateſt Cauſes of detriment, and impediment to Sciences.* Thus much concerning the *Art of Judging*. Eth. lib. 1.

CHAP. V.

I. The Partition *of Art Retentive, or of Memory into the Knowledge of the Helps of Memory.* §. *and the Knowledge of the Memory it ſelf.*
II. The Diviſion *of the Doctrine of Memory into* Prenotion. §. *and Emblem.*

I WE *will divide the Art of Retaining, or of Cuſtody, into two Knowledges; that is, into the knowledge of the Helps of Memory, and the Knowledge of the Memory it ſelf.* Aſſiſtant to *Memory is writing*; and it muſt by all means be noted, that *Memory* of it ſelf, without this ſupport, would be too weak for prolix and accurate matters; wherein it could no way recover, or recall it ſelf, but by Scripture. And this *ſubſidiary ſecond* is alſo of moſt ſpecial uſe in *Inductive Philoſophy, and the Interpretation of Nature*. For a man may as well perfect, and ſum up the *Computations* of an *Ephemerides* by mere *Memory*; as comprehend the *Interpretation* of *Nature* by meditations, and the nude, and native ſtrength of *Memory*; unleſs the ſame *Memory* be aſſiſted by *Tables*, and *Indices* provided for that Purpoſe. But to let go the *Interpretation of Nature*, which is a new knowledge; there ſcarcely can be a thing more uſeful even to ancient, and popular Sciences, than a ſolid, and good *Aid* to *Memory*; that is, a ſubſtantial and Learned *Digeſt* of *Common places*. Neither am I ignorant, *that the referring of thoſe things we read, or learn, into Common Places, is imputed by ſome as a Prejudice to Learning; as cauſing a retardation of Reading, and a ſlothful relaxation to Memory.* But becauſe it is a Counterfeit thing in Knowledge, to be forward and pregnant, unleſs you be withal deep and full; I hold that the diligence, and pains in collecting *Common Places*, is of great uſe and certainty in ſtudying; as that which Subminiſters Copy to *Invention*; and contracteth the ſight of Judgment to a ſtrength. *But this is true, that of the Methods and Syntagms of Common Places, which we have ſeen, there is none that is of any worth; for that in their Titles, they mere-*

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ly repreſent the face, rather of a School, than of the world; exhibiting Vulgar and Pedantical Diviſions, and not ſuch as any way penetrate the Marrow and Pith of things.

§ As for *Memory* it ſelf; that in my Judgement hitherto hath been looſely, and weakly inquired into. There is indeed an Art extant of it; but we are certain that there may be had both better Precepts for the confirming and increaſing *Memory*, than that Art comprehendeth; and a better practice of that Art may be ſet down, than that which is receiv'd. Neither do we doubt (if any man have a mind to abuſe this Art to oſtentation) but that many wonderful and prodigious Matters may be performed by it. But for uſe (as it is now managed) it is a barren thing. Yet this in the mean time we do not tax it withal, that it doth ſupplant, or ſurcharge *Natural Memory* (as commonly is objected) but that it is not dexteroully applied to lend aſſiſtance to *Memory* in buſineſs, and ſerious occaſions. And we have learned this (it may be from our practiſed Courſe in a civil Calling) that whatſoever makes oſtentation of Art, and gives no aſſurance of uſe, we eſteem as as nothing worth. For to repeat on the ſudden a great number of names or words, upon once hearing, in the ſame order they were delivered; or to pour forth a number of verſes upon any argument *extempore*; or to tax every thing that falls out in ſome ſatyrical ſimile; or the turning of every thing to a jeſt; or the eluding of every thing by a contradiction or cavil, and the like; whereof in the faculties of the mind there is a great ſtore; and ſuch as by wit and practice may be exalted to a great degree of wonder. All theſe and the like, we make no more eſtimation of, than we do of the agilities and tricks of Tumblers, Buffoons and Juglers. For they are almoſt all one thing, ſeeing theſe abuſe the Powers of the Body, theſe the Powers of the Mind; and perchance they may have ſome ſtrangeneſs in them; but little or no worthineſs.

II. *This Art of Memory* is built upon two Intentions, *Prenotion* and *Emblem*. We call *Prenotion a Preciſion of endleſs Inveſtigation*; for when a man would recal any thing to *Memory*, if he have no *Prenotion* or *Preception* of that he ſeeketh, he ſearcheth indeed, and taketh pains, rounding this way and that way, as in a maze of infinity. But if he have any certain *Prenotion*, preſently that which is infinite is diſcharged and cut off; and the queſtioning of the *Memory* is brought within a more narrow compaſs; as in the hunting of a Fallow Deer within the Park. Therefore it is evident, *that the Method helps the Memory*; for *Prenotion* ſuggeſteth that it muſt agree with order. So verſes are ſooner gotten by heart than Proſe; for if a man make a doubtful ſtand at a word, *Prenotion* prompts him that the word which agrees with the verſe, muſt be of ſuch a Nature. And this *Prenotion* is the firſt part of Artificial *Memory*. For in *Memory Artificial* we have places digeſted and provided before hand: But we make *Images extempore*, according as the preſent ſhall require. But *Prenotion* doth admoniſh that the *Image* muſt be ſuch as hath ſome reſemblance with the *place*; this is that which awaketh, and in ſome ſort muniteth the *Memory* in the chaſe of what we ſeek.

§ *Emblem deduceth conceptions intellectual to Images ſenſible, and that which is ſenſible, more forcibly ſtrikes the Memory, and is more eaſily imprinted, than that which is intellectual.* So we ſee that even the *Memo-*

ry of Beasts is stirr'd up by a *sensible* object, not by an *intellectual*. So you will more easily *remember* the *Image* of a Hunts man pursuing the Hare, or of an Apothecary setting in order his Boxes, or of a Pedant making a Speech, or of a Boy reciting Verses by heart, or of a Jester acting upon a Stage, than the *Notions of Invention*, *Dispositition*, *Elocution*, *Memory*, *Action*. There are other things that pertain to the *help of Memory* (as we said even now) but the *Art* which now is in use consists of these two Inventions now set down. To pursue the *particular Defects* of Arts, would be to depart from our intended purpose. Wherefore let thus much suffice for the Art of *Retaining*, or of *Custody*. Now we descend in order to the fourth member of *Logick*, which handles *Tradition* and *Elocution*.

THE

THE

Sixth Book

OF

FRANCIS L. VERULAM

VICOUNT St *ALBAN*,

OF THE

Dignity and Advancement

OF

LEARNING.

To the KING.

CHAP. I.

I. The Partition *of the Art of Tradition into the Doctrine of the Organ of Speech. The Doctrine of the Method of Speech; And the Doctrine of the Illustration of Speech.* § The Partition *of the Doctrine of the Organ of Speech; into the Knowledge of the Notes of things; of Speaking; and of Writing; of which the two last constitute* Grammar, *and the Partitions thereof.* § The Partition *of the Knowledge of the Notes of things; into Hieroglyphicks; And into Characters Real.* II. A second Partition *of Grammar, into Literary and Philosophical.* III. An Aggregation *of Poesie, referring to Measure, unto the Knowledge of Speech.* An Aggregation *of the Knowledge of Cyphers to the Knowledge of Writing.*

CErtainly any man may assume the liberty (*Excellent King*) if he be so so humour'd, to jest and laugh at himself, or his own Projects. Who then knows whether this work of ours be not perchance a Transcript out of an Ancient Book found amongst the the Books of that famous Library of *S. Victor*, a Catalogue whereof *M. Fra. Rabelais* hath collected? For there a Book is found entitled *Formicarium Artium*; we have indeed accumulated a little heap of *small Dust*; and laid up many *Grains of Arts and Sciences* therein, whereto Ants may creep, and there repose a while

Liv. 2. c. 7. *des faicts & dicts de Bon Pantagr.*

while, and so betake themselves to new labours. Nay the wisest of
PROV. 6. Kings *sends the slothful*, of what rank or quality soever, *unto the Ants; whose only care is to live upon the main stock, but not to improve it by sowing the ground of Sciences over again, and reaping a new Harvest.*

I. *Now let us come unto the Art of Delivery, or of Expressing, and Transferring those things which are Invented, Judged, and laid up in Memory; which, by a general name, we will term Tradition.* This comprehendeth in it all Arts touching Words and Speeches; for *though Reason be*, as it were, *the Soul of Speech*, yet in the manner of handling, *Reason* and *Speech* should be separate, even as the *Soul* and the *Body* are. We will divide these *Traditive Sciences* into three Parts; *into the Knowledge concerning the Organ of Speech; into the Knowledge concerning the Method of Speech; and into the Knowledge concerning the Illustration and Ornament of Speech.*

§ The Knowledge *concerning the Organ of Speech* generally receiv'd, which is also called *Grammar*, hath two Parts; the one of *Speech*; the other of *Writing*. For *Aristotle* saith well, *Words are the Images of Cogi-*
De Interpret. *tations; Letters are the Images of Words*; we will assign both to *Grammar*. But to derive the Matter somewhat higher before we come to *Grammar*, and the Parts thereof now set down; we must speak of the *Organ of Tradition* in general. For there seems to be other *Traditive Emanations* besides *Words* and *Letters*. For this is certain whatsoever may be distinguisht into differences, sufficient for number, to express the variety of Notions (so those differences be perceptible to sense) may be the Convoy of the Cogitations from man to man. For we see Nations of different Language to trade one with the other, well enough to serve their turn by *Gestures*. Nay, in the practice of many, that have been dumb and deaf from their birth, and otherwise were ingenious, we have seen strange Dialogues held between them, and their friends, who have learn'd their Gestures. *Moreover it is now* generally known that in *China*, and the Provinces of the high *Levant*, there are at this day in use, certain *Real*, and not *Nominal Characters*; that is, such as express neither *Letters* nor *Words*; but *Things* and *Notions*: in so much, that many Countries that understand not one anothers Language, but consenting in such kind of *Characters* (which are more generally receiv'd amongst them) can communicate one with another by such *Figures* written; so as every Country can read and deliver in his own native Tongue, the meaning of any Book written with these *Characters*.

* § *Notes* therefore of things, which without the help and mediation
DE NOTIS RERUM. of *Words* signfie *Things*, are of two sorts; whereof the first sort is significant of *Congruity*; the other *ad placitum*. Of the former sort are *Hieroglyphicks* and *Gestures*; of the later are those which we call *Characters Real*. The use of *Hieroglyphicks* is very ancient, and had in a kind of Veneration; especially amongst the Egyptians, one of the most Ancient Nations: So that *Hieroglyphicks* seem to have been a *first-born writing*, and elder than the *Elements* of *Letters*; unless, it may be, the *Letters* of the Hebrews. *As for Gestures*, they are, as it were, Transitory *Hieroglyphicks*. For as words pronounced vanish, *writings* remain; so *Hieroglyphicks* expressed by *Gestures*, are transient, but *painted*, permanent. As when *Periander* being consulted with, how to preserve a Tyranny, bid

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the Meſſenger ſtand ſtill, *and he walking in a Garden, topt all the higheſt flowers*; ſignifying the cutting off, and the keeping low of the Nobility; did as well make uſe of a *Hieroglyphick*, as if he had drawn the ſame upon Paper. This in the mean is plain, that *Hieroglyphicks* and *Geſtures* ever have ſome ſimilitude with the thing ſignified, and are kind of *Emblems*; wherefore we have named them the *Notes of things from Congruity*. But *Characters Real* have nothing of Emblem in them; but are plainly dumb and dead Figures, as the *Elements* of *Letters* are; and only deviſed *ad Placitum*, and confirmed by Cuſtom, as by a tacit agreement. And it is manifeſt alſo that there muſt needs be a vaſt number of them for writing; at leaſt ſo many as there are Radical words. Wherefore this portion of Knowledge *concerning the Organ of Speech, which is of the Notes of Things, we report as Deficient.* And though it may ſeem of no great uſe, conſidering that *Words* and *writings by Letters* are the moſt apt *Organs* of *Tradition*; yet we thought good to make mention of it here, as of a knowledge not to be deſpiſed. For we here handle, as it were, the *Coyns of things Intellectual*; and it will not be amiſs to know, that as Money may be made of other matter beſides Gold and Silver; ſo there may be ſtamped other *Notes* of things beſides *Words* and *Letters*. Herodot. Laert.

II Let us proced to *Grammar*; *this doth bear the office as it were, of an Uſher to other Sciences*; *a place not very honourable, yet very neceſſary, eſpecially ſeeing that in our age Sciences are chiefly drawn from Learned Languages, and not from Mother-tongues.* Nor is the dignity thereof to be eſteemed mean, ſeeing it ſupplies the place of an Antidote, againſt that *Malediction* of the *Confuſion* of *Tongues*. Surely the Induſtry of man ſtriveth to reſtore, and redintegrate himſelf in thoſe Benedictions, which by his guilt he forfeited; and by all other Arts arms and ſtrengthens himſelf againſt that firſt general Curſe of the *ſterility of the earth, and the eating of his bread in the ſweat of his brows.* But againſt that ſecond Curſe, which was the *Confuſion* of *Tongues*, *he calls in the aſſiſtance of Grammar*. The uſe hereof in ſome Mother-tongues is indeed very ſmall; in forreign tongues more large; but moſt ample in ſuch tongues, as have ceaſed to be vulgar, and are perpetuated only in Books. Gen 3.

§ *We will divide Grammar into two ſorts, whereof the one is Literary, the other Philoſophical.* The one is merely applied to Languages, that that they may be more ſpeedily learned; or more correctedly and purely ſpoken. *The other* in a ſort doth miniſter, and is ſubſervient to *Philoſophy*. In this later part which is *Philoſophical*, we find *that Cæſar writ Books De Analogia*; and it is a queſtion whether thoſe Books handled this Philoſophical Grammar whereof we ſpeak? Our opinion is, that not any high and ſubtil matter in them, but only that they deliver'd Precepts of a pure and perfect ſpeech, not depraved by popular Cuſtom; nor corrupted and polluted by over-curious affectation; in which kind *Cæſar* excell'd. *Notwithſtanding*, admoniſh'd by ſuch a work, we have conceiv'd and comprehended in our mind, a kind of Grammar, that may diligently enquire, not the *Analogy of words one* with another, but the *Analogy* between Words and Things, or Reaſon; beſides that *Interpretation of Nature*, which is ſubordinate to *Logick*. Surely *Words* are the *foot-ſteps of Reaſon*; and foot-ſteps do give ſome indications of the Body; wherefore we will give ſome general deſcri- Suet in Iul.

GRAMMATICA PHILOSOPHANS.

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ption of this. And first we do not allow that curious enquiry which
In Cratyl. *Plato* an excellent man pursued, touching the *imposition* and *original Etymology of names.* conceiving it, *as if words had not been imposed at first, ad Placitum; but were significantly derived and deduced from a certain reason and intendment.* Certainly an elegant and pliant speculation, which might be aptly fain'd and made square to the purpose: and by reason it seemeth to search the secrets of Antiquity, in some kind reverend. But yet sparingly mixt with truth, and without fruit. *But without* question that would be a most excellent kind of *Grammar* (as we suppose if some man throughly instructed in many *Languages*, as well *Learned*, as *Mother-tongues*, should write a Treatise of the divers Proprieties of *Languages*; shewing in what points every particular Language did excel; and in what points it was *Deficient.* For so *Tongues* might be enricht and perfected by mutual intertraffick one with another; and a most fair Image of speech (like the *Venus* of *Apelles*); and a goodly pattern for the true expression of the inward sence of the mind, might be drawn from every part which is excellent in every Language. *And withal* no slight Conjectures, but such as were well worth the observation, might be taken (which a man perchance would little think) touching the natural dispositions and customs of People, and Nations, even from their Languages. *For I willingly* give ear to *Cice-*
De Orat. lib. 2. *ro* noting that the Grecians have not a word which may express this Latine word, *Ineptum*; *because* (saith he) *this vice was so familiar to the Grecians, that they did not so much as acknowledge themselves guilty thereof.* Certainly a Censure worthy a Roman gravity. And what may that infer, that the Grecians used such a Liberty in composition of words; contrarywise the Romans were in this point severe? Surely a man may plainly collect that the Grecians were more fit to study Arts; the Romans to manage affairs of state. For distinctions of Arts, for most part, require composition of words; but matters and business, simple words. *But the Hebrews so shun Composition, that they make choice rather to strain a Metaphor too far, than to bring in a Composition.* Nay they use so few words, and so unmingled, that a man may plainly perceive by their Tongue, that they were a Nazarite People, and separate from other Nations. *And is not that* worthy observation? (though it may serve to abate our high conceit of our own times) *that ancient Languages were more full of Declensions; Cases; Conjugations; Tenses, and the like; the modern commonly destitute of these, do loosely deliver themselves in many expressions by Prepositions, and auxiliary verbs.* Certainly a man may easily conjecture (however we may please our selves) that the wits of former times were far more acute and subtil than ours are. There are an infinite number of observations of this kind which might make up a just Volume. Wherefore it will not be amiss to distinguish *Grammar Philosophical*, from *mere and literary Grammar*, and to set it down as *Deficient*. Unto *Grammar* also belongs the consideration of all *Accidents* of words; such as are *Measure*; *Sound*; *Accent*; but those first infancies of simple Letters (as, with what Percussion of the Tongue, with what opening of the mouth; with what drawing of the lips, with what straining of the throat; the sound of every Particular *Letter* is to be made) belongs not unto *Grammar*; but is a Portion of the *knowledge of Sounds*, to be handled *under Sense* and *Sensibility. Grammatical Sound*,

whereof

whereof we ſpeak, belongs only to ſweetneſs and harſhneſs of ſounds; of which ſome are common; for there is no Tongue but in ſome ſort ſhuns the too much overture of concurrent Vowels, and the aſperities of concurrent Conſonants. There are other reſpective ſounds which are pleaſing, or unpleaſing to the ear, according to the temper of divers Nations. *The Greek Tongue* is full of Diphthongs; the Latin is far more ſparing; the Spaniſh Tongue hates ſmall-ſounding Letters, and preſently changeth them into Letters of a middle tone; the Tongues derived from the *Goths* delight in Aſpirates; there are innumerable of this nature, but perchance theſe are more than enough.

III. *But the meaſure of words* hath brought us forth an immenſe Body of Art, namely *Poeſie*; not in reſpect of the Matter (of which we have ſpoken before) but in reſpect of ſtile, and the form of words, as *Metre* or *Verſe*; touching which the Art is very ſmall and brief, but the acceſs of Examples large and infinite. Neither ought that Art (which the Grammarians call *Proſodia*) to be only reſtrain'd to the kinds and meaſures of *Verſe*; for their are Precepts to be annext, what kind of *Verſe* beſt fitteth every Matter or Subject. The Ancients applied *Heroical Verſe* to *Hiſtories* and *Laudatories*; *Elegies* to *Lamentations*; *Jambicks* to *Invectives*; *Lyricks* to *Songs* and *Hymns*. And this Wiſdom of the Ancients is not wanting in the *Poets* of later Ages, in Mother-tongues; only this is to be reprehended, that ſome of them too ſtudious of Antiquity have endeavoured to draw Modern Languages to Ancient Meaſures (as *Heroick*, *Elegiack*, *Saphick*, and the reſt) which the Fabrick and compoſition of thoſe Languages, will not bear; and withal is no leſs harſh unto the ear. In the Matters of this Nature the Judgement of Senſe is to be preferr'd before Precepts of Art, as he ſaith,

——*Cœnæ Fercula noſtræ*
Mallem Convivis quam placuiſſe Coquis.

Mart. Ep. 9.

Nor is *this Art*, but the abuſe of Art, ſeeing it doth not perfect, but perverts Nature. *As for Poeſie (whether we ſpeak of Fables, or Metre) it is, as we have ſaid before, as a Luxuriant Herb brought forth without ſeed, and ſprings up from the ſtrength and rankneſs of the ſoyl. Wherefore it runs along every where, and is ſo amply ſpread, as it were a ſuperfluous labour to be curious of any Deficients therein*; the care therefore for this is taken already.

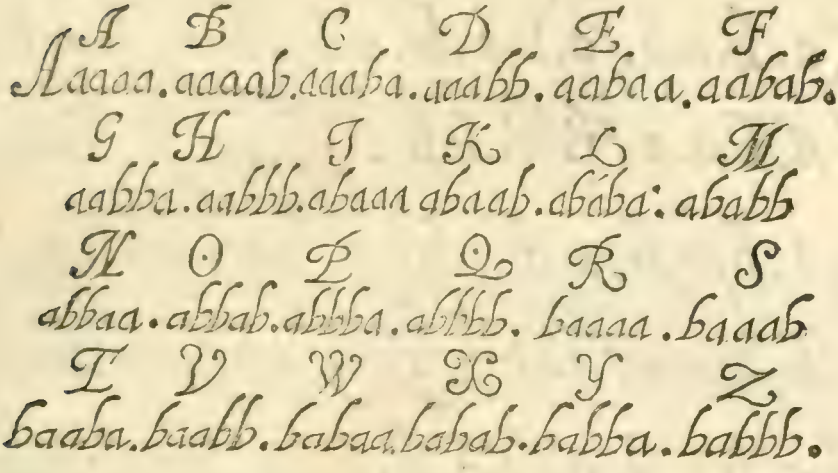
§ *As for the Accents of Words*, there is no need, that we ſpeak of ſo ſmall a matter; unleſs, perchance, ſome may think it worth the noting, that there hath been exact obſervations made of the *Accents of Words*, but not of the *Accents of Sentences*; yet this, for moſt part, is the general Cuſtom of all men, that in the cloſe of a Period they let fall their voice, in a demand they raiſe it, and many ſuch like uſages.

§ *As for Writing*, that is perform'd either by the vulgar Alphabet, which is every where receiv'd; or by a ſecret and private Alphabet, which men agree upon between themſelves, which they call *Cyphers*. But the *Vulgar Orthography* hath brought forth unto us a Controverſie, and Queſtion, namely, *Whether words ſhould be written as they are ſpoken, or rather after the uſual manner.* But this kind of writing, which ſeems to be reformed, which is, *that writing ſhould be conſonant to ſpeaking*, is a branch of unprofitable ſubtilties; for *Pronunciation* it ſelf

every day encreaſes and alters the faſhion; and the derivation of words, eſpecially from forreign Languages, are utterly defac'd and extinguiſht. In brief, ſeeing *writing*, according to the receiv'd Cuſtom, doth no way prejudice the *manner of ſpeaking*, to what end ſhould this innovation be brought in?

§ *Wherefore let us come to Cyphers.* Their kinds are many, as *Cyphers ſimple*; *Cyphers intermixt with Nulloes*, or non-ſignificant Characters; *Cyphers of double Letters under one Character*; *Wheel-Cyphers*; *Key-Cyphers*; *Cyphers of words*; *Others*. But the virtues of them, whereby they are to be preferr'd, are Three; *That they be ready, and not laborious to write*; *That they be ſure, and lie not open to Decyphering: And laſtly, if it be poſſible, that they may be managed without ſuſpition.* For if Letters Miſſive fall into their hands, that have ſome command and authority over thoſe that write; or over thoſe to whom they were written; though the Cypher it ſelf be ſure and impoſſible to be *decypher'd* yet the Matter is liable to examination and queſtion; unleſs the *Cypher* be ſuch, as may be void of all ſuſpition, or may elude all examination. *As for the ſhifting* off examination, there is ready prepared a new and profitable invention to this purpoſe; which, ſeeing it is eaſily procured, to what end ſhould we report it, as *Deficient*. The invention is this: That you have two ſorts of *Alphabets*, one of *true Letters*, the other of *Non-ſignificants*; and that you likewiſe fold up two *Letters*; one which may carry the ſecret, another ſuch as is probable the Writer might ſend, yet without peril. Now if the Meſſenger be ſtrictly examined concerning the *Cypher*, let him preſent the *Alphabet* of *Non-ſignificants* for true *Letters*, but the *Alphabet* of true *Letters* for *Non-ſignificants*: by this Art the Examiner falling upon the *exterior Letter*, and finding it probable, ſhall ſuſpect nothing of the *interior Letter*. But that jealouſies may be taken away, we will annex another invention, which, in truth, we deviſed in our youth, when we were at *Paris*: and is a thing that yet ſeemeth to us not worthy to be loſt. It containeth the *higheſt degree of Cypher*, which is to ſignifie *omnia per omnia*, yet ſo, as the *writing infolding*, may bear a quintuple proportion to the *writing infolded*; no other condition or reſtriction whatſoever is required. It ſhall be performed thus: Firſt, let all the *Letters* of the *Alphabet*, by tranſpoſition, be reſolved into two *Letters* only; for the tranſpoſition of two *Letters* by five placings will be ſufficient for thirty two Differences, much more for twenty four, which is the number of the *Alphabet*. The example of ſuch an *Alphabet* is on this wiſe.

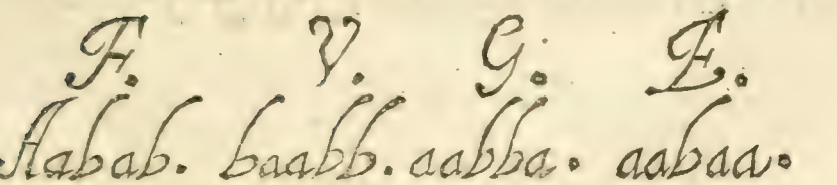
An Example of a Bi-literate Alphabet.



Neither is it a ſmall matter theſe *Cypher-Characters* have, and may perform: For by this *Art* a way is opened, whereby a man may expreſs and ſignifie the intentions of his mind, at any diſtance of place, by objects which may be preſented to the eye, and accommodated to the ear: provided thoſe objects be capable of a two-fold difference only; as by Bells, by Trumpets, by Lights and Torches, by the Reports of Muskets, and any Inſtruments of like nature. But to purſue our enterpriſe, when you addreſs your ſelf to write, reſolve your inward-infolded Letter into this *Bi-literary Alphabet*. Say the *interiour Letter* be

Fuge.

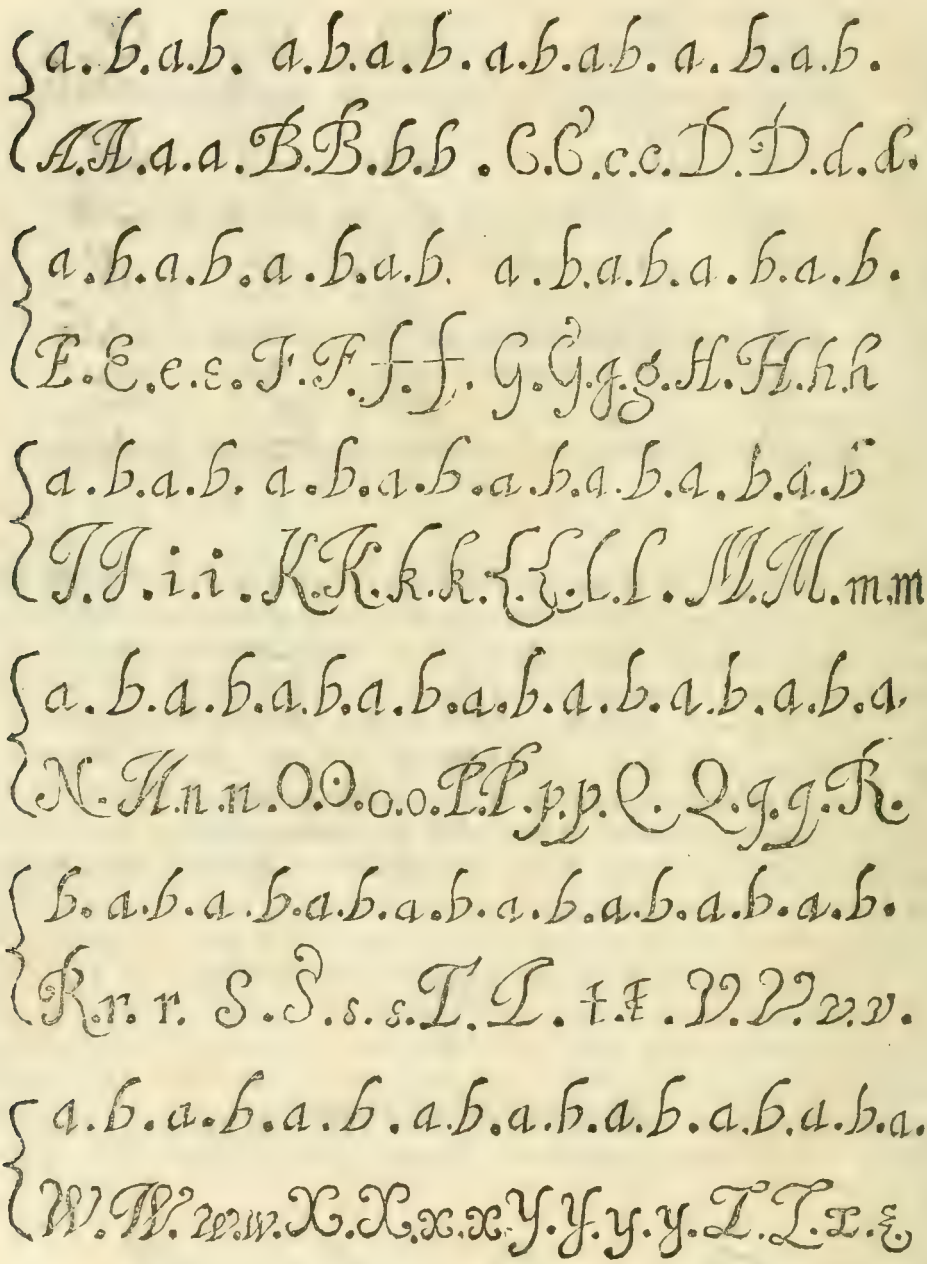
Example of Solution.



Together with this, you muſt have ready at hand a *Bi-formed Alphabet*, which may repreſent all the *Letters* of the *Common Alphabet*,

as well Capital Letters as the ſmaller Characters in a double form, as may fit every mans occaſion.

An Example of a Bi-formed Alphabet.

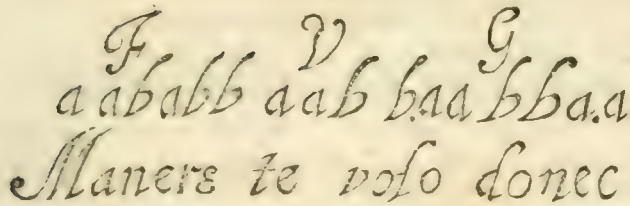


Now

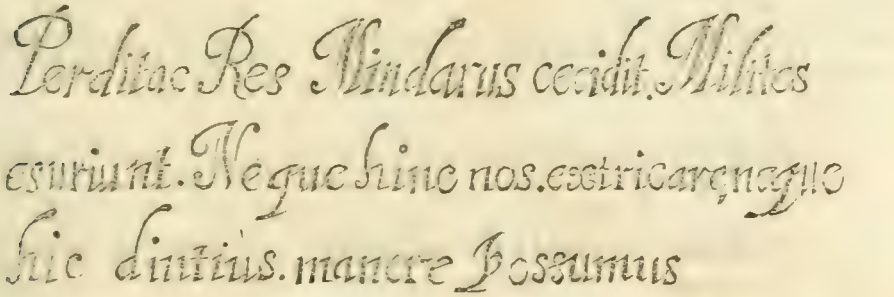
Now to the interiour Letter, which is Bi-literate, you ſhall fit a Bi-formed exteriour Letter, which ſhall anſwer the other, Letter for Letter, and afterwards ſet it down. Let the exteriour example be,

Manere te volo, donec venero.

An Example of Accommodation.



We have annext likewiſe a more ample Example of the Cypher of Writing *omnia per omnia:* An interiour Letter, which to expreſs, we have made choice of a *Spartan* Letter ſent once in a *Scytale* or round Cypher'd-ſtaff.



An exteriour Letter, taken out of the firſt Epiſtle of *Cicero*, wherein a *Spartan* Letter is involved:

Ego

Ego, omni, officio, ac potius pietate erga te cæteris, satisfacio omnibus: Mihi ipsemum= quam satisfacio. Tanta est enim magni= tudo tuorum erga me meritorum, vt quoni= am tu, nisi perfectâre, de me non conquiês= ti; ego, quia non idem in tuâ causâ efficio, vitam mihi esse acerbum putem. In cau= sâ hæc sunt: Ammonius Regis Legatus apertè pecuniâ nos oppugnat: Res agitur per eosdem creditores, per quos, cùm tu de ea, agebatur. Regis causâ, si qui sunt, qui velint; qui pauci sunt, omnes ad Pompe= ium rem deferri volunt. Senatus Reli= gionis calumniam, non religione, sed ma= levolentia, et illius Regiæ Largitionis invidiâ comprobat. &c.

The

The knowledge of Cyphering, hath drawn on with it a knowledge relative unto it, which is the knowledge of *Diſcyphering*, or of Diſcreting *Cyphers* though a man were utterly ignorant of the *Alphabet* of the *Cypher*, and the Capitulations of ſecrecy paſt between the Parties. *Certainly* it is an Art which requires great pains and a good wit, and is (as the other was) conſecrate to the Counſels of Princes: yet notwithſtanding by diligent previſion it may be made unprofitable, though, as things are, it be of great uſe. For if good and faithful *Cyphers* were invented and practiſed, many of them would delude and foreſtal all the cunning of the *Decypherer*, which yet are very apt and eaſie to be read or written: but the rawneſs and unskilfulneſs of Secretaries, and Clerks in the Courts of Princes, is ſuch, that many times the greateſt Matters are committed to futile and weak Cyphers. But it may be, that in the enumeration, and, as it were, taxations of Arts, ſome may think that we go about to make a great Muſter-rowl of Sciences, that the multiplication of them may be more admired; when their number perchance may be diſplayed, but their forces in ſo ſhort a Treatiſe can hardly be tried. *But for* our parts we do faithfully purſue our purpoſe, and in making this *Globe of Sciences*, we would not omit the leſſer and remoter Iſlands. *Neither* have we (in our opinion) touched theſe Arts perfunctorily, though curſorily; but with a piercing ſtile extracted the Marrow and Pith of them out of a Maſs of Matter. The judgement hereof we refer to thoſe who are moſt able to judge of theſe *Arts*. *For ſeeing it is the faſhion of many who would be thought to know much, that every where, making oſtentation of words and outward terms of* Arts, *they become a wonder to the ignorant, but a deriſion to thoſe that are Maſters of thoſe* Arts: *we hope that our Labours ſhall have a contrary ſucceſs, which is, that they may arreſt the judgement of every one who is beſt vers'd in every particular* Art; *and be undervalued by the reſt.* As For thoſe *Arts* which may ſeem to be of inferiour rank and order, if any man think we Attribute too much unto them; let him look about him, and he ſhall ſee that there be many of ſpecial note and great account in their own Country, who when they come to the chief City or Seat of the Eſtate, are but of mean rank, and ſcarcely regarded: ſo it is no marvail if theſe ſleighter *Arts*, placed by the Principal and Supreme *Sciences*, ſeem petty things; yet to thoſe that have choſen to ſpend their Labours and Studies in them, they ſeem great and excellent Matters. And thus much of the *Organ of Speech.*

Chap.

CHAP. II.

1. The Doctrine touching *the Method of Speech is assigned a substantial and principal part of Traditive knowledge:* It is entituled, *The wisedom of Delivery.* 2. The divers kinds of *Methods are enumerated: their Profits and Disprofits are annexed.* 3. *The parts of Method two.*

I. *LEt us now come to the doctrine concerning the Method of Speech:* This hath been handled as a part of *Logick*, so it hath found a place in *Rhetorick* by the name of *Disposition.* But the placing of *it* as a part of the Train of other *Arts*, hath been the cause that many things which refer unto *it*, and are useful to be known, are pretermis'd: wherefore we thought good, to constitute a *substantial and principal Doctrine*, touching *Method*, which by a general name we call the *wisdom of Tradition. The kinds of Method*, seeing they are divers, we will rather reckon them up, than divide them. *But for one onely* Method, *and continued* Dichotomies *we need not speak much of them; for it was a little Cloud of knowledge which was soon dispersed. Certainly a trivial invention, and an infinite prejudice to Sciences; for these* Dichotomists, *when they would wrest all things to the Laws of their Method, and whatsoever doth not aptly fall within those* Dichotomies *they would either omit or bow contrary to their natural inclination;* they bring it so to pass, that the *Kernels and Grains of Sciences leap out, and they clasp and include only the dry and empty husks: So this kind of Method brings forth fruitless Compends, destroys the substance of Sciences.*

II. Wherefore let the first difference of *Method* be set down, to be either *Magistral*, or *Initiative:* neither do we so understand the word *Initiative*, as if *this* should lay the ground-work, the *other* raise the perfect building of *Sciences*; but in a far different sence, (borrowing the word from sacred Ceremonies) we call that *Initiative Method*, which discloseth and unvails the Mysteries of Knowledges: For *Magistral teacheth, Initiative insinuateth: Magistral requires our belief to what is delivered, but Initiative that it may rather be submitted to examination.* The *one* delivers popular *Sciences* fit for Learners; the *other, Sciences* as to the *Sons of Science:* In sum, the one is referred to the use of *Sciences* as they now are; the other to their continuation, and further propagation. *The later of these*, seems to be a deserted and an inclosed path. For Knowledges are now delivered, as if both Teacher and Schollar sought to lay claim to error, as upon contract. *For he that teacheth, teacheth in such a manner as may best be believed, not as may be best examined: and he that learneth, desires rather present satisfaction, than to expect a just and stayed enquiry; and rather not to doubt, than not to err: So as both the Master, out of a desire of glory, is watchful, that he betray not the weakness of his knowledge; and the Scholar, out of an averse disposition to labour, will not try his own strength.* But Knowledge, which is delivered as a thread to be spun on, *ought to be intima-*

* TRADITIO LAMPADIS, SIVE METHODUS AD FILIOS.

ted

ted (if it were poſſible) *into the mind of another, in the ſame Method wherein it was at firſt invented.* And ſurely this may be done in knowledge acquired by *Induction:* But in this ſame anticipated and prevented knowledge, which we uſe, a man cannot eaſily ſay, by what courſe of ſtudy he came to the knowledge he hath obtained. But yet certainly more or leſs a man may reviſit his own *Knowledge*, and meaſure over again the footſteps of his *Knowledge*, and of his conſent; and by this means ſo tranſplant *Science* into the mind of another, as it grew in his own. For it is in *Arts*, as it is in *Plants*; if you mean to uſe the *Plant*, it is no matter for the Roots; but if you would remove into another ſoyl, than it is more aſſured to reſt upon roots than ſlips. So the *Delivery* of Knowledge, as it is now uſed, *doth preſent unto us fair Bodies indeed of Sciences, but without* the *Roots*; good, doubtleſs for the Carpenter, *but not for the Planter.* But if you will have *Sciences* grow, you need not be ſo ſollicitous for the *Bodies*; apply all your care that the *Roots* may be taken up ſound, and entire, with ſome little earth cleaving to them. Of which kind of *Delivery*, *the Method* of the *Mathematicks* in that ſubject, hath ſome ſhadow, but generally I ſee it neither put in ure, nor put in *Inquiſition*; and therefore number it amongſt *Deficients*, and we will call it *Traditionem Lampadis, the Delivery of the Lamp, or the Method bequeathed to the ſons of Sapience.*

§ *Another diverſity of Method* followeth, in the intention like the former, but for moſt part contrary in the iſſue. In this both theſe *Methods* agree, that *they* ſeparate the vulgar *Auditors* from the *Select*; here *they* differ, that the *former* introduceth a more open way of *Delivery* than is uſual; the *other* (of which we ſhall now ſpeak) a more reſerved and ſecret. *Let therefore* the diſtinction of them be this, *that the one is an Exoterical or revealed; the other an Acroamatical, or concealed Method.* For the ſame difference the Ancients 'ſpecially obſerved in publiſhing Books, the ſame we will transfer to the manner it ſelf of *Delivery. So the Acroamatick Method* was in uſe with the Writers of former Ages, and wiſely, and with judgement applied; but that *Acroamatick* and Ænigmatick kind of expreſſion is diſgraced in theſe later times, by many who have made it as a dubious and falſe light, for the vent of their counterfeit merchandiſe. But the pretence thereof ſeemeth to be this, that by the intricate envelopings of *Delivery*, the Prophane Vulgar may be removed from the ſecrets of Sciences; and they only admitted, which had either acquired the interpretation of Parables by Tradition from their Teachers; or by the ſharpneſs and ſubtilty of their own wit, could pierce the veil.

§ *Another diverſity of Method* follows, of great conſequence to *Sciences*, which is, when Sciences are delivered by way of *Aphoriſm*, or *Methods*. For it is a thing worthy to be preciſely noted, that it hath been often taken into Cuſtom, that men out of a few Axioms and Obſervations upon any Subject, have made a compleat and ſolemn Art, filling it with ſome diſcourſes of wit, illuſtrating it with examples, and knitting it together by ſome *Method*. But that other way of *Delivery* by *Aphoriſms*, brings with it many advantages, whereto *Delivery by Method* doth not approach. For firſt it tryes the Writer whether he be ſuperficial or ſolid in knowledge. For *Aphoriſms* except they ſhould

be altogether ridiculous, cannot be made but out of the pyth and heart of Sciences: For Illuſtration and Excuſſion are cut off; variety of examples is cut off; Deduction and Connection are cut off; Deſcription of Practice is cut off; ſo there remaineth nothing to fill the Aphoriſms, but a good quantity of obſervations. And therefore no man can ſuffice, nor in reaſon will attempt to write *Aphoriſms*, who is not copiouſly furniſh'd and ſolidly grounded. But in *Methods*,

Horat. de Art. P. ——*Tantum ſeries, juncturaque pollet;*
Tantum de medio ſumptis accedit Honoris.

As oftentimes they make a great ſhew of (I know not what) ſingular Art, which if they were disjoynted, ſeparated, and laid open, would come to little or nothing. Secondly, *Methodical Delivery* is more fit to win conſent or belief; but leſs fit to point to Action; for *they* carry a ſhew of *Demonſtration in Orb* or Circle, one part illuminating another; and therefore do more ſatisfie the underſtanding; but being that Actions in common courſe of life are diſperſt, and not orderly digeſted, they do beſt agree with diſperſed Directions. Laſtly, *Aphoriſms* repreſenting certain Portions only, and as it were fragments of Sciences, invite others to contribute, and add ſomething; whereas *Methodical Delivery*, carrying ſhew of a total and perfect Knowledge, forthwith ſecureth men as if they were at the furtheſt.

§ Another diverſity of Method follows, which is likewiſe of great weight, which is when *Sciences* are delivered either by *Aſſertions* with their *Proofs* annext; or by *Queſtions* together with their *Determinations*. The later kind whereof, if it be immoderately followed, is as prejudicious to the progreſſion of Sciences, as it is to the fortunes and proceedings of an Army, to go about to beſiege every little Fort or Hold. For if the field be kept, and the ſum of the enterprize with diligence purſued, thoſe ſmaller places will come in of themſelves. Yet this I cannot deny, that it is not alway ſafe to leave any great and fortified town at his back. *In like manner the uſe of Confutations* in the Delivery of Sciences ought to be very ſparing, and to ſerve only to remove and break ſtrong Preoccupations and Prejudgements of mens minds, and not to excite and provoke *ſmaller Doubts*.

§ *Another diverſity of Method* followeth, which is, that the *Method be accommodated to the purpoſed matter which is to be handled*. For there is a great difference in Delivery of the *Mathematicks*, which are of knowledges the moſt abſtracted and moſt ſimple; and the *Politicks*, which are the moſt immerſed and compounded: Neither can an *uniformity of Method* (as we have obſerv'd already) be fitly ſorted with *multi-formity of Matter*; and therefore as we have allowed *Particular Topicks* for *Invention*; ſo we would likewiſe in ſome meaſure have *Particular Methods* for *Tradition*.

§ *Another diverſity of Method* followeth, with judgement to be practis'd in the Delivery of Sciences; and it *is directed according to the light of Informations, and anticipations, of the Knowledge to be delivered, infuſed, and impreſſed in the minds of the Learners*. For that Knowledge which is new and foreign to mens minds, is to be delivered in another form than that which by long receiv'd, and imbibed opinions is naturalized

ralized and made familiar: And therefore *Ariſtotle* when he thinks to tax *Democritus* doth in truth commend him, where he ſaith, *If we ſhall indeed diſpute, and not follow after ſimilitudes, &c.* Charging it as a defect upon *Democritus* that he was too copious in *Compariſons*. *But thoſe whoſe conceits are ſeated in popular opinions, have nothing elſe to do but to diſpute and prove. Whereas on the contrary thoſe whoſe conceits are beyond popular opinions, have a double labour; firſt, that what they produce may be conceiv'd; then, that they be proved.* So that it is of neceſſity with them to have recourſe to *Similitudes* and *Tranſlations*, whereby they may inſinuate themſelves into mens capacities. *Therefore* we ſee in the infancy of Learning, in rude times, when thoſe Comprehenſions which are now Vulgar and Trivial, were then new and unheard of; the world was full of *Parables* and *Similitudes*; for otherwiſe men would have paſſed over without mark or due attention, or elſe rejected for Paradoxes, that which was propounded. For it is a rule of Traditive Art, *That whatſoever Science is not conſonant to Anticipations or Preſuppoſitions, muſt pray in aid of Similitudes and Compariſons.* And thus much of the divers ſorts of Methods, namely ſuch as have not heretofore been noted by others. As for thoſe other *Methods*, *Analytick*; *Syſtatick*; *Dieritick*; *Cryptick*; *Homerical*, and the like; they have been well invented and diſtributed; nor do we ſee any cauſe why we ſhould dwell upon them.

III *But theſe are the kinds of Method*; *the Parts are two*; the one of the *Diſpoſition of a whole work*, *or of the Argument of ſome Book*; the other of the *Limitations* of *Propoſitions*. For there belongs to *Architecture* not only the frame of the whole Building; but likewiſe the form and figure of the Columns; Beams, and the like; and *Method is as it were the Architecture of Sciences*. And herein *Ramus* merited better a great deal in reviving thoſe excellent Rules Καθ' ὅλου πρῶτον, πάντες, καθ' αὑτό, than in obtruding *one only Method* and *Dichotomie*. But it falls out I know not by what fate, *that of humane things (according as the Poets often feign) the moſt precious have the moſt pernicious Keepers.* Certainly diligent endeavours about the rank and file of Propoſitions, caſt him upon thoſe *Epitomes* and *ſhallows of Sciences*; for he had need ſet out in a lucky hour, and to go on by the conduct of a happy Genius, that attempts to make *Axioms of Sciences Convertible*; and yet withal not make them *Circular*, or returning into themſelves; notwithſtanding we deny not, but that *Ramus*'s intention in this kind is profitable. *There remains yet two Limitations of Propoſitions*, beſides that they may be made *Convertible*; the one touching the *Extenſion*; the other touching the *Production* of them. Surely Knowledges have, if a man mark it well, two other dimenſions beſides *Profundity*; namely *Latitude* and *Longitude*. For *Profundity* is referr'd to the Truth and Reality of them; and theſe make them ſolid. As for the other two, *Latitude* may be taken and reckoned of Science into Science; *Longitude* may be accepted and underſtood from the higheſt general Propoſition, to the loweſt particular in the ſame Science. The one comprehends the bounds and true limits of Sciences, that Propoſitions may be properly, not promiſcuouſly handled; and that all Repetition, Excurſion, and Confuſion may be avoided: the other gives rule how far, and to what degree of Particularity, Propoſitions of ſciences may be deduced. Certainly

Ramus.

there is no doubt but ſomewhat muſt be left to uſe and Practice; for
Dion. in Anton. P. for we ought to avoid the preciſe error of *Antonius Pius*, that we be not *Cumini ſectores in Scientiis*, *Mincers of Commin in ſciences*; nor that we multiply diviſions to the loweſt Particularity. Wherefore how we ſhould moderate our ſelves in this point is well worth the enquiry. For we ſee too remote Generalities, unleſs they be drawn down, do little inform, nay rather expoſe Knowledge to the ſcorn of Practical men; and are no more ayding to Practice, than an *Ortelius's Univerſal Mapp* is to direct the way between *London* and *York*. Surely the better ſort of Rules have not unfitly been compared to Glaſſes of ſteel, wherein you may ſee the Images of things, but firſt they muſt be filed and burniſht: ſo Rules and Precepts do then help, after they have been laboured and poliſht by Practice; but if thoſe Rules may be made clear and Chryſtalline aforehand, it would be the more excellent, becauſe they would leſs ſtand in need of diligence, labour and exerciſe after. *And thus much of the Knowledge of Method*, which we have named the *Wiſdom* of *Delivery*. Nor can we here pretermit that many more vain-glorious, than learned have laboured about a *Method*, which is not worthy the name of a lawful *Method*, ſeeing it is rather a *Method of Impoſture*; which yet to ſome vaporous, and vain-boaſting natures, without doubt hath been moſt acceptable. This *Method* doth ſo ſprinkle drops of any Knowledge, that any half-learned Clerk may with a little ſuperficiary Knowledge make a glorious ſhew. Such was the Art of *Lullius*; ſuch
Lullius. the *Typocoſmie* drawn by many; which were nothing elſe but a heap and maſs of words of all Arts, to give men countenance; that thoſe which have the terms of Art, might be thought to underſtand the Arts themſelves. Which kind of Collections are like a Fripper's or Broker's ſhop, that hath ends of every thing, but nothing of worth.

CHAP. III.

I The *Grounds and Duty of Rhetorick*. II. *Three Appendices of Rhetorick which appertain only to the Preparatory Part. The Colours of Good and Evil, as well ſimple as Compared*. III. *The Antitheta of things*. IV. *Leſſer ſtiles, or uſual forms of ſpeech*.

NOw come we to the Knowledge which concerneth the *Illuſtration of Speech*; it is that which is called *Rhetorick*, or Art of *Eloquence*; a Science certainly both excellent in it ſelf, and by Authors excellently well laboured. But *Eloquence*, if a man value things truly, is without doubt inferior to *Wiſdom*. For we ſee how far this leaves that be-
Exod. 7. hind, in thoſe words of *God* to *Moſes*, when he diſabled himſelf for that ſervice impoſed upon him, for want of this *Faculty*; *There is Aaron, he ſhall be thy Speaker, thou ſhalt be to him as God*. Yet in profit and popular eſteem, *Wiſdom* gives place to *Eloquence*; for ſo *Solomon*, *Sapiens corde appellatur prudens; ſed dulcis eloquio majora reperiet*; ſignifying
Prov. XVI. not obſcurely *that profoundneſs of Wiſdom will help a man to fame and admiration; but that it is Eloquence which prevails in buſineſs and active Life.*

Life. And as to the labouring and culture of this Art, the Emulation of *Ariſtotle* with the *Rhetoricians* of his time, and the earneſt and vehement diligence of *Cicero*, labouring with all might to raiſe and ennoble that *Art*, joyned with long Experience, hath made them in their Books written of this *Art* to exceed themſelves. Again, the excellent example of *Eloquence* in the *Orations* of *Demoſthenes*, and *Cicero*, added to the ſubtilty and diligence of Precepts, have doubled the Progreſſion in this *Art*. Wherefore the *Deficients* which we find in this *Art*, will be rather in ſome Collections, which may as Hand-maids attend the *Art*; than in the Rules and the uſe of the *Art it ſelf*. For even then when we made mention of a *Promptuary Knowledge* in *Logick*, we engaged our ſelves by Promiſe, to exhibit Examples at large thereof in *Rhetorick*.

Notwithſtanding that we may ſtir up and ſubdue the earth a little, about the Roots of this *Science*, as our manner is to do in the reſt; ſurely *Rhetorick* is *ſub-ſervient* to the *imagination*, as *Logick* is to the *Underſtanding*. And the office and duty of *Rhetorick* (if a man well weigh the matter) is no other, than *to apply and command the Dictates of Reaſon to the Imagination, for the better moving of the Appetite and Will.* For we ſee the government of Reaſon is diſquieted, and aſſailed three ways; either by *Illaqueation* of *Sophiſms*, which pertains to *Logick*; or by the *deceits of words*, which pertains to *Rhetorick*; or by the *violence of Paſſions*, which pertains to *Morality*: And as in negociation with others, a man may be wrought and overcome either by *Cunning*, or by *Importunity*, or by *Vehemency*, ſo in that inward negociation which we practiſe within our ſelves, either we are undermined *by the Fallacies of Arguments*; or ſollicited and diſquieted by the *aſſiduity of impreſſions and obſervations*; or ſhaken and tranſported *by the aſſault of affections and paſſions.* But yet the ſtate of man's nature is not ſo unfortunate, as that thoſe *Powers* and *Arts* ſhould have force to diſturb *Reaſon*, and not to eſtabliſh and advance it; nay, rather much more do they conduce to this effect, than to the contrary. For the end of *Logick*, is to teach a form of Arguments, to ſecure Reaſon, and not to entrap it; ſo the end of Morality is to compoſe the *Affections*, that they may fight for Reaſon, and not that they may invade it; the end likewiſe of *Rhetorick*, is to fill the *Imagination* with obſervations and reſemblances, which may ſecond Reaſon, and not oppreſs and betray it: for theſe abuſes of *Arts* come in but *ex obliquo* for prevention, not for practice. And therefore it was great injuſtice in *Plato* (though ſpringing out of a juſt hatred to the *Rhetoricians* of his time) to place *Rhetorick* amongſt *Arts voluptuary*, reſembling it to *Cookery*, that did marr wholeſome meats, and help unwholeſome by the the abuſe of of variety of ſawces and ſeaſonings, to the pleaſure of the taſte. But be it far away, that ſpeech ſhould not be much more converſant in adoring that which is fair and honeſt, than in colouring that which is foul and evil: for this is every where at hand; and there is no man but ſpeaks more honeſtly than he can do or think. Indeed it was excellently noted by *Thucydides*, that ſome ſuch thing as this, uſed to be objected to *Cleon*, that becauſe he uſed to hold the bad ſide in cauſes he pleaded, therefore he was ever inveighing againſt *Eloquence*, and *good ſpeech*, for he knew no man could ſpeak fair of things ſordid and baſe

In Gorg.

baſe, but in things honeſt it was an eaſie matter to be *eloquent*. *Plato* In Menon. ſaith elegantly (though the ſaying be now popular) *That vertue, if ſhe could be ſeen, would move great love and affection:* but Rhetorick paints our vertue and goodneſs to the life, and makes them in a ſort conſpicuous: For ſeeing they cannot be ſhewed to ſenſe in corporal ſhape, the next degree is by the fair attire of words, to ſhew them to the Imagination, ſo far as may be in a lively repreſentation: for the cuſtom of the Stoicks was deſervedly derided by *Cicero*, who labour'd to thruſt ver- Tuſc. Q. lib. tue upon men, by conciſe and ſharp ſentences and concluſions, which have no ſympathy with the Imagination and Will. Again, if the *Affections* themſelves were brought into order, and ſo reclaim'd from exorbitant courſes, as to be pliant and obedient to *Reaſon*, it were true, there ſhould be no great uſe of perſwaſions and inſinuations, which might give acceſs to the mind; but it would be enough if things were nakedly and ſimply propoſed and proved: but on the contrary, the *Affections* make ſuch revolts; and raiſe up ſuch mutinies and ſeditions (according to that

Ovid. Met. 7. ——*video meliora Proboque*
Deteriora ſequor)——

That *Reaſon* would be forcibly led away into ſervitude and captivity, if the perſwaſion of *Eloquence* did not practiſe, and win the Imagination from the Affections part, and contract a league between *Reaſon* and *Imagination* againſt *Affections*. For it muſt be noted that the *Affections* themſelves are ever carried to a good Apparent, and, in this reſpect, have ſomewhat common with *Reaſon*: but herein they differ; *that the affections behold principally good in preſent; Reaſon beholds a far off, even that which is future, and in ſumm.* And therefore ſeeing things in preſent ſight do more ſtrongly fill the *Imagination*; Reaſon commonly yields and is vanquiſht: but after that by *Eloquence*, and the force of perſwaſion, things *future* and *remote* are propoſed, and beheld, as if they were actually preſent; then upon the falling off of the *Imagination*, to take part with *Reaſon*, *Reaſon* prevails. *Let us* conclude therefore, that *Rhetorick*, can no more be charged with the colouring and adorning of the worſe part, than *Logick*, with the ſetting out and ſuborning of Sophiſms: for who knows not that the doctrine of contraries are the ſame, though they be oppoſite in uſe. Again, *Logick* differs from *Rhetorick*; not only in this, that the one (as commonly is ſaid) *is like the Fiſt, the other like the Palm*; that is, one handleth things cloſely, the other at large: but much more in this, that *Logick* conſidereth Reaſon in its Naturals; *Rhetorick*, as it is planted in vulgar opinion. Therefore *Ariſtotle* doth wiſely place *Rhetorick* between *Logick* on the one ſide, and *Ethick* with *Civil Knowledge* on the other: as participating of both. For the Proofs and Demonſtrations of *Logick*, are to all men indifferent and the ſame; but the Proofs and Perſwaſions of *Rhetorick*, muſt be varied according to the Auditors, that a man, like a skilful Muſician accommodating himſelf to different ears, may become——

Orpheus in ſylvis, inter Delphinas Arion.

Which

Which *Application and variance of ſpeech* (if a man deſire indeed the perfection and height thereof) ought to be ſo far extended, *that if the ſame things ſhould be ſpoken to ſeveral perſons, he ſhould ſpeak to them all reſpectively, and ſeveral ways.* Though it is certain that the greateſt Orators many times may want *this politick and active part of Eloquence in private Speech*; whilſt by the obſerving the Grace, and Elegant forms of Expreſſion, they looſe that *voluble application*; and *characters of ſpeech*, which in diſcretion they ſhould have uſed towards particular perſons. Surely it will not be amiſs to recommend this whereof we now ſpeak, to a new *Inquiry*, and to call it by name, *The Wiſdom of private Speech*, and to refer it to *Deficients*; a thing certainly which the more ſeriouſly a man ſhall think on, the more highly he ſhall value; and whether this kind of *Prudence* ſhould be placed between *Rhetorick* and the *Politicks*, is a matter of no great conſequence. * PRUDENTIA SERMONIS PRIVATI.

§ Now let us deſcend to the *Deficients* in this Art, which (as we have ſaid before) are of ſuch nature as may be eſteemed rather *Appendices*, than *portions of the Art* it ſelf; and pertain all to the *Promptuary* part of *Rhetorick*.

II. Firſt, we do not find that any man hath well purſued or ſupplied the wiſdom and the diligence alſo of *Ariſtotle*: for he began to make a collection of the *Popular Signs and Colours of Good and Evil in appearance, both ſimple and comparative*, which are, indeed, the *Sophiſms of Rhetorick*: they are of excellent uſe, ſpecially referred to buſineſs, and the *wiſdom of private ſpeech*. But the labours of *Ariſtotle* concerning theſe Colours, is three ways *defective*; *Firſt*, that there being many, he recites very few. *Secondly*, becauſe their *Elenchs* or *Reprehenſions* are not annext. *Thirdly*, that he conceiv'd but in part the uſe of them, for their uſe is not more for Probation, than for impreſſion and raiſing the affections. For many *Forms of ſpeaking* are equal in *ſignification*, which are different in *impreſſion*: for that which is ſharp pierceth more forcibly, than that which is flat, though the ſtrength of the percuſſion be the ſame. Surely there is no man but will be a little more raiſed by hearing it ſaid, *Your enemies will triumph in this*, * COLORES BONI ET MALI. In Trop.

Hoc Ithacus velit & magno mercentur Atridæ, Virg. Æn. 2.

Then if it ſhould be merely thus rendred, *This will be to your diſadvantage*; wherefore the *ſharp-edged*, and *quick-pointed ſpeeches* are not to be deſpiſed. And being we report this part as *Deficient*, we will, according to our cuſtom, confirm it by Examples, for Precepts have not ſufficiently illuſtrated the Point.

Examples

Examples of the Colours of Good and Evil, both Simple and Comparative.

The Colour.

1. *What men Praiſe and Celebrate, is Good; what they Diſpraiſe, and Reprehend is Evil.*

The Reprehenſion.

THis *Colour* deceives four ways; either through *Ignorance*, or through *Fraud*, or out of *Partialities* and *Faction*; or out of the *natural diſpoſition* of ſuch as *Praiſe* or *Diſpraiſe*. Out of *Ignorance*; for what's the judgement of the common People to the trial and definition of *Good* and *Evil? Phocion* diſcern'd better, who when the People gave him an unuſual applauſe, demanded *whether he had not perchance ſome way or other done amiſs?* Out of *Fraud* and Circumventive *cunning*, for Praiſers and Diſpraiſers many times do but aim at their own ends, and do not think all they ſay

Plutar. in vita.

Horat. lib. 2. Epi.

Laudat venaleis qui vult extrudere merces,

Prov. 20. So, *It is naught, it is naught ſaith the Buyer, and when he is gone he vaunteth.*—— Through *Factions*; for it is plain that men are wont to extol their own ſide, beyond the modeſt bounds of deſert, but to depreſs thoſe of the contrary part below their demerit. *Through an inbred diſpoſition*; for ſome men are by nature made and moulded to ſervile Flattery; others on the other ſide are by nature Sowre and Cenſorious; ſo as in their commendations, or vituperations they are only indulgent to their own humours, little or nothing ſollicitous of truth.

The Colour.

2. *What draws Commendation even from an Enemy, is a great Good, What moves Reprehenſion even from a Friend, is a great Evil.*

The *Colour* ſeems to be built upon this foundation; that whatſoever we ſpeak againſt our will, and contrary to the affection and propenſion of our own mind, it is eaſily believed, that the force of truth wreſted the ſame from us.

The Reprehenſion.

THis *Colour deceives* through the Art and Subtilty both of Enemies and Friends: for Enemies do ſometimes aſcribe *Praiſes*, not unwillingly, nor as urg'd from the force of Truth: but yet ſelecting ſuch points

points of *Praiſe*, as may create envie and danger to their Enemies. wherefore a ſuperſtitious conceit went currant amongſt the Grecians as they believed, *that he who was praiſed by another maliciouſly, and to his hurt, ſhould have a puſh riſe upon his noſe.* Again it *deceives*, becauſe enemies ſometimes attribute *Praiſes*, as certain brief Prefaces, that ſo they may more freely and ſpitefully traduce afterwards. On the other ſide, this *Colour* deceives through the ſlight and cunning of Friends; for their cuſtom is ſometimes to acknowledge and lay open the infirmities of their Friends, not out of a tender Conſcience from the impreſſion of Truth, but making choice of ſuch imperfections, as may leaſt prejudice the reputation, or provoke the indignation of their Friends; as if in all other points they were excellent men. *Again it deceives*, becauſe Friends uſe their Reprehenſions (as we have obſerved Enemies do their Praiſes) as certain ſhort Introductions, that they may expatiate more amply in their commendations aftewards.

The Colour.

3 *Whoſe Privation is Good, that ſame is Evil; Whoſe Privation is Evil, that ſame is Good.*

The Reprehenſion.

THis *Colour* deceives two ways; either by reaſon of the *Compariſon* of *Good* and *Evil*; or by reaſon of the *Succeſſion* of *Good* to *Good*, or of *Evil* to *Evil*. By reaſon of *Compariſon*; if it were *Good* for mankind to be *deprived* of the eating of Acorns, it follows not that ſuch food was *Evil*, but that Maſt was *Good*, Corn *Better*. Neither if it were *Evil* for the State of *Sicily* to be deprived of *Dionyſius* the Elder; doth it follow that the ſame *Dionyſius* was a *Good* Prince; but that he was *leſs Evil* than *Dionyſius* the younger. By reaſon of *Succeſſion*, for the *Privation* of ſome *Good*, doth not always give place to *Evil*; but ſometimes to a *greater Good*; as when the *Flower* falleth, Fruit *ſucceedeth*. Nor doth the *Privation* of ſome *Evil* always yield place to *Good*, but ſometimes to a *greater Evil*; for *Clodius* an enemy being taken away, *Milo* withal forfeited a fair harveſt of Glory.

The Colour.

4 *That which draws neer to Good or Evil, the ſame is likewiſe Good or Evil: But that which is remov'd from Good is Evil; from Evil, is Good.*

Such commonly is the internal condition of things, that things of like Quality, and conſenting in Nature, conſent likewiſe in place, and are, as it were, quartered together, but ſuch things as are contrary and diſtant in Nature, are alſo ſevered and disjoyned inplace; in regard that all things deſire to approach things ſymbolizing with them; to exterminate and chaſe away their contraries.

The Reprehenſion.

BUt the *Colour* deceives three ways: Firſt, in reſpect of *Deſtitution*: Secondly, in reſpect of *Obſcuration*: Thirdly, in reſpect of *Protection*. In regard of *Deſtitution*, it comes to paſs that thoſe things, which in their kind are moſt ample, and do moſt excel, do (as much as may be) ingroſs all to themſelves, and leave that which is next them deſtitute and pined; wherefore you ſhall never find thriving Shoots or Under-wood near great ſpread Trees: ſo he ſaid well——

——*Divitis ſervi maximè ſervi*;——

and the deriſion was pleaſant of him that compared the lower Train of Attendants in the Courts of Princes, to *Faſting-days* which were next to Holy-days, but otherways were the leaneſt days in all the week. In regard of *Obſcuration*, for this is the quality of things in their nature excellent and predominant, that though they do not extenuate and impoveriſh the ſubſtance of things adjoyning to them, yet they darken and ſhadow them: And this the Aſtronomers obſerve of the the Sun, that it is good by Aſpect, but evil by Conjunction and Approximation. In regard of *Protection*; for things approach and congregate not only for conſort and ſimilitude of Nature; but even that which is evil (eſpecially in Civil Matters) approacheth to good for Concealment and *Protection*; ſo wicked perſons betake themſelves to the ſanctuary of the Gods, and Vice it ſelf aſſumes the ſhape and ſhadow of Virtue.

Sæpe latet vitium proximitate boni.

So on the other ſide, *Good* draws near to *Evil*, not for ſociety, but for converſion and reformation of it into *Good*; and therefore Phyſicians are more converſant with the ſick than the ſound; and it was objected to our Saviour *that he converſed with Publicans and Sinners.* Mat. 9.

The Colour.

5 *That ſide, to which all other Parties and Sects unanimouſly confer ſecond voices, after every particular hath aſſerted a Primacy to it ſelf, ſeems to be juſtly preferr'd before the reſt: for every Sect may be preſum'd to uſurp the firſt place, out of Paſſion and Partiality; but to yield the ſecond place, out of Truth and Merit.*

So *Cicero* went about to prove the *Sect* of *Academicks*, which ſuſpended all aſſeveration, for to be the beſt of all Phiſoſophies; for (ſaith he) *ask a Stoick which Sect is better than other, he will prefer his own before the reſt: Then ask him which approacheth next in dignity, he will confeſs the Academick, ſo deal with an Epicure that will ſcant endure the Stoick to be in the ſight of him, ſo ſoon as he hath placed himſelf in the chief room, he will place the Academick next him.* So if a place were void, and a Prince ſhould examine Competitors ſeverally, whom next themſelves they Cicero. Q. A.

they would ſpecially commend, it were like that the moſt ſecond voices would concurr upon the ableſt men.

The Reprehenſion.

THe fallax of this *Colour* is in reſpect of *Envy*: for men are accuſtomed after themſelves, and their own faction, to incline and bend unto them, which of all the reſt are the ſofteſt and weakeſt, and are leaſt in their way in deſpight and derogation of them who have moſt inſulted over them, and have held them hardeſt to it.

The Colour.

6 *That whoſe excellency, and ſupereminency is bettter, the ſame is every way better.*

Appertaining to this are the uſual *forms*; *Let us not wander in generalities, let us compare particular with particular.*

The Reprehenſion.

THis *Apparence* ſeems to be of ſtrength, and rather *Logical*, than *Rhetorical*: yet is it very often a *fallax*. Firſt, becauſe many things are caſual, which if they eſcape, prove excellent; ſo that in kind they are inferiour, becauſe they are ſo ſubject to peril, and to periſh before they come to perfection; but in the *Individual* more noble. Of this ſort is the *Bloſſom of March*, whereof the French Proverb goes

Burgeon de Mars, Enfans de Paris,
Si un eſchappe bien vaut dix.

So that the *Bloſſom of May generally* is better than the *Bloſſom of March*, and yet in particular the beſt *Bloſſom of March*, is better than the beſt *Bloſſom of May*. Secondly it deceives, becauſe the nature of things, in *ſome kinds, or ſpecies*, is to be more *equal*, in ſome kinds more *inequal*: as it hath been obſerved that warmer climates produce generally more acute wits; but in Northern climates the wits of chief ſur-paſs the acuteſt wits of hotter Regions. So in many Armies, if the Matter ſhould be tried by Duel between particular champions ſingled out, perchance the victory ſhould go on the one ſide; if it be tried by the groſs, it would go on the other ſide: for *excellencies*, and *eminencies* go, as it were, by chance, but kinds are governed by Nature and Art. So likewiſe generally Metal is more precious than Stone; and yet a *Diamond* is more precious than *Gold*.

The Colour.

7 *That which keeps the Matter entire in our own hands, is Good; that which leaves no paſſage open for retrait, is Evil: for not to be able to come off is a kind of impotency, but the Power of diſengaging our ſelves is good.*

Hereof *Æſop* framed the Fable of the two Froggs, that conſulted together in the time of drouth (when many plaſhes, they had repaired to, were dry) what was now at laſt to be done; the firſt ſaid *let us go down into a deep well, for it is not like the water would fail there,* to whom the other replied, *yea, but if it do fail; how ſhall we get up again?* The ground of this *colour* is, that humane actions are ſo uncertain and expoſed to perils, *as that ſeemeth to be the beſt courſe, which hath moſt paſſages out of it.* Appertaining to this perſwaſion the *Forms* are; *you ſhall wholly engage and oblige your ſelf, non tantum, quantum voles, ſumes ex fortuna, you ſhall not be your own carver, nor keep the matter in your own hand,* &c.

Æſop.

The Reprehenſion.

THe *Fallax* of this *Colour* is firſt, becauſe in Humane Actions Fortune urgeth us at length to decree, and to reſolve upon ſomewhat: for as he ſaith elegantly, *not to reſolve, is to reſolve*; ſo that many times a ſuſpenſion of a final deciſion engageth and implicates us in more neceſſities, than if we had determin'd of ſomewhat. And this diſeaſe of the mind is like that of covetous men tranſlated from the deſire of retaining wealth, to the deſire of retaining Free-will and Power: for the covetous man will enjoy nothing, leſt he ſhould ſubſtract from the total; and this kind of *Sceptick* will execute nothing, that all things may be entire and indifferent to him. *Secondly*, it *deceives* becauſe neceſſity, and this ſame *jacta eſt alea*, awakens the powers of the Mind and puts the ſpurs to any enterpriſe; as he ſaith, *Cæteris pares, neceſſitate certè ſuperiores eſtis.*

The Colour.

8 *What a man hath contracted through his own Default, is a greater Evil; what is impoſed from without, is a leſs Evil.*

The reaſon hereof, is, *becauſe the ſting and remorſe of the Mind accuſing it ſelf, doubles all adverſity; contrariwiſe the recording inwardly that a man is clear and free from fault, and juſt imputation, doth much attemper outward calamities.* Wherefore the *Poets* do exceedingly aggravate thoſe paſſionate Lamentations, as fore-runners to deſperation; when a man accuſeth and tortures himſelf.

Se cauſam clamat, crimenq; caputq; malorum.

Virg. Æn. 12.

Contrariwiſe the *conſcience of Innocence* and good deſerving, do mollifie and mitigate the calamities of worthy perſons. *Beſides* when the evil comes from without, caſt upon us by others, a man hath whereof he may juſtly and freely complain, whereby his griefs may evaporate and not ſtifle the heart: for what comes from the injuries of men, we are wont to take indignation at, and meditate revenge; or elſe to implore, or expect, that the divine Nemeſis, and Retribution, may take hold on the Authors of our hurt; or if it be inflicted from *Fortune*, yet their is left a kind of expoſtulation againſt the Divine Powers,

Atq;

Atque Deos atque Aſtra vocat Crudelia Mater. Virg. Buc.

But on the other ſide, where the evil is derived from a man's own fault, there the grief ſtrikes inward, and does more deeply wound and pierce the heart.

The Reprehenſion.

THe *Fallax* of this *Colour* is, firſt in reſpect of *Hope*, which is a great Antidote againſt *Evils:* for the reformation of a fault is many times in our own power, but the amendment of fortune is not. Wherefore in many of his Orations *Demoſthenes* ſaith thus to the People of *Athens: That which having regard to the time paſt, is the worſt Point and Circumſtance of all the reſt; that as to the time to come, is the beſt: what is that? Even this, that by your ſloth, irreſolution, and miſgovernment, your affairs are grown to this declination and Decay; for had you uſed and ordered your means and forces to the beſt, and done your parts every way to the full, and notwithſtanding your matters ſhould have gone backward in this point as they do, there had been no hope left of recovery or reputation for hereafter; but ſince it hath been only by your own errors chiefly, you may have good aſſurance, that thoſe errors amended, you may again recover the honour of your former ſtate.* So *Epictetus* ſpeaking of the Degrees of the Tranquillity of mind, ſaith *the worſt ſtate of man is to accuſe extern things; better then that, to accuſe a mans ſelf; and beſt of all to accuſe neither.* Secondly this colour deceivs in reſpect of that *pride* which is implanted in the minds of men, whereby they are with much ado induced to an acknowledgement of their own perſonal errors; but that they may ſhift off this acknowledgement, they can ſuffer with far greater patience ſuch *evils*, as they have by their own overſights drawn upon themſelves. For as we ſee it comes to paſs that when a fault is committed, and it is not yet known who is the delinquent, men make much ado; grow hot and impatient above meaſure upon the matter: but after, if it appear to be done by a ſon; or by a wife, or by a near friend, then it is light made of, and preſently all is quiet: ſo it is when any thing falls out ill, the blame whereof muſt needs lite upon our ſelves. And this is commonly ſeen to come to paſs in women, who if they have done any thing unfortunately againſt their Parents or Friends conſents, what ill ſoever betide them upon it, yet you ſhall ſee them ſeldom complain, but ſet a good face on it. Demoſ. orat. Epictet.

The Colour.

9 *The Degree of Privation ſeems greater than the Degree of Diminution; and again, the Degree of Inception, ſeems greater than the Degree of Increaſe.*

It is a poſition in the Mathematicks; *that there is no proportion between ſomewhat and nothing: therefore the Degrees of Nullity and Quiddity, ſeem larger, than the Degrees of Increaſe and Decreaſe.* As to a Monoculus, it

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is more to loose one eye, than to a man that hath two eyes: so if one have divers children, it is more grief to him to loose the last surviving son, than all the rest. And therefore *Sibylla* when she had burnt her two first *Books*, doubled the price of the *Third*, because the loss of that had been *gradus Privationis*, and not *Diminutionis*.

Agell lib. 1 No. At.

The Reprehension.

THe *Fallax* of this *Colour* is reprehended; *first in those things, the use and service whereof resteth in sufficiency, or competency, that is in a determinate Quantity.* As if a man be bound upon penalty to pay a sum of money at an appointed day, it would be more to him to want one *Noble*, than if, (supposing he could not tell where to be furnisht with this one Noble) ten Nobles more were wanting. So in the decay of a man's estate, the degree of Debt which first breaks the stock, and casts him behind, seems a greater damage, than the last Degree, when he proves nothing worth. And hereof the common *Forms* are, *Sera in fundo Parsimonia: and as good never a whit, as never the better, &c. Secondly this Colour deceives in respect of that Principle in Nature; Corruptio unius, Generatio alterius:* so that the *degree of ultimate Privation, doth many times less disadvantage, because it gives the cause, and sets the wits a-work to some new course.* Which is the cause that *Demosthenes* often complains before the people of Athens. *That the conditions imposed by Philip, and accepted by them, being neither profitable, nor honourable, were but aliments of their sloth and weakness, that it were much better they were taken away; for by this means their industries might be awaked to find out better remedies and stronger resolutions.* We knew a Physician was wont to say pleasantly and yet sharply to delicate Dames, when they complained they were they could not tell how, but yet they could not endure to take any Physick; he would tell them, *your only way is to be sick indeed, for then you will be glad to take any medicine.* So further, this *Degree of Privation*, or of the highest period of want, serveth not only to stir up industry, but also to command patience. As *for the second* branch of this *Colour*, it depends upon the same reason, which is the degrees of *Quiddity and Nullity*; hence grew the common Place of extolling the *beginning* of every thing

Hesiod.

Arist. 1. de Gen. & Cor.

Orat. 1. in Philip.

Dimidium facti qui bene cæpit habet.

This made the Astrologers so idle as to make a judgement upon a man's nature and Destiny, from the moment or point of constellation in his Nativity, or Conception.

The Reprehension.

THis *Colour first deceives, because in many things, the first inceptions are nothing else than what* Epicurus *terms them in his Philosophy, Tentamenta, that is imperfect Offers, and Essays, which vanish and come to no substance without iteration and improvement.* Wherefore in this case the *second degree* seems the worthier, and more potent than the *First*: as the Body-horse in the Cart that draws more than the formost. And

it

it is a common saying, and not without good sence, *The second blow is that which makes the fray:* for the first, it may be, would have vanisht without farther harm: and therefore *Prius Malo Principium dedit, sed posterius modum abstulit. Secondly this colour deceives in respect of the dignity of Perseverance, which consists in the Progression, and not in the Aggression.* For chance, or instinct of Nature, may cause inception; but setled affection and judgement makes the continuance. *Thirdly, this Colour deceives in such things which have a natural course and inclination contrary to an Inception; so that the first Inception is perpetually evacuated, unless the force and faculty be continued.* As in those common forms it is said *Non progredi est Regredi*; and *Qui non proficit deficit*, as in running against the hill; rowing against the stream; for if it be with the hill or with the stream, then the *degree of Inception* is more than all the rest. Again this Colour is not only extended to the *Degree of Inception, which is from Power to Act, compar'd with the Degree, which is from Act to increment*; *but also is to be understood of the degree which is from Impotency to power, compared with the Degree which is from power to Act: for the Degree from Impotency to Potency, seems greater, than from Power to Act.*

The Colour.

10 *That which is referred to Truth, is more than that which is referred to opinion. The manner and Proof of that which pertains to Opinion, is this; that a man would never have done it, if he thought it should be sepulchred in secrecy and oblivion.*

So the Epicures say to the Stoicks, *Felicity placed in virtue*, that it is like the *Felicity* of a Player, who if he were left of his Auditors, and their applause, he would streight be out of heart and countenance; therefore they call virtue, out of a spiteful emulation, *Bonum Theatrale.* But it is otherwise of Riches, whereof the Poet saith

——*Populus me sibilat: at mihi plaudo* Horat.

Likewise of *Pleasure*;

——*Grata sub imo*
Gaudia Corde premens, vultu simulante pudorem.

The Reprehension.

THe *Fallax* of this *Colour* is somewhat subtil; though the answer to the exemple alledged be ready; for neither is virtue chosen *propter Auram Popularem*; seeing that also is given in Precept, *That a man should above all things, and persons, revere himself*; so that a *Good* man is the *same* in *solitude* which he is in the *Theatre*; though perchance virtue will be more strong by glory and fame, as heat is encreased by reflection: But this denyes the supposition, but doth not redargue the *Fallax.* The Reprehension is this, be it granted that virtue (especially such as is joyned with labour and conflict) would not be chosen but for her concomitants, *Fame* and *Opinion*; yet it follows not that an appetite and chief Motive to virtue, should not be real, and for it

self;

ſelf; for Fame may be only *cauſa impulſiva, or ſine qua non*, and not a cauſe *Conſtituent* or *Efficient*. For example, if there were two Horſes, whereof the one would perform with good ſpeed, without the ſpur; but the other with the ſpur would far exceed the performance of the former; this latter (I ſupppoſe) will bear away the prize, and be judg'd to be the better *Horſe*; and it will not move any man of ſound judgement to ſay, *Tuſh the life of this Horſe, is but in the ſpur:* for ſeeing the ordinary inſtrument of Horſemanſhip is the *ſpur*, and that it is no matter of impediment or burden; the *Horſe* is not to be leſs accounted of, which will not do well without the ſpur: nor is that other which without the ſpur will do great matters, therefore to be reckoned the better, but the more delicate. So in like manner, *Glory and Honour are the Goads and ſpurs to virtue*; and though virtue would ſomewhat languiſh without them, yet ſince they be always at hand to attend virtue, even when they are not invited; there is no impeachment but that virtue may be deſired for it ſelf; and therefore the Poſition, *That the note of a thing choſen for Opinion and not for Truth, is this; That if a man thought that what he doth, ſhould never come to light, he would never have done it*; is reprehended.

The Colour.

11 *What is purchaſed by our own induſtry and virtue, is a greater Good; what is derived upon us, from the benefit of others, or from the indulgence of Fortune, is a leſſer Good.*

The reaſons are theſe? *Firſt in reſpect of future Hope; becauſe in the favour of others, or the good winds of fortune, we have no ſtate or certainty; in our own endeavours or abilities we have.* So when they have procured us one good fortune, we have the ſame inſtruments ready for a new purchaſe; nay by cuſtom and ſucceſs, ſtronger than before. *Secondly becauſe theſe Properties which we enjoy by the benefit of others, we are debtors to others for them; whereas what we derive from our ſelves, brings no burden with it, nor draws upon us an obligation to another.* Again, if the Divine Providence confer a favour upon us, it importunes a kind of Retribution towards the goodneſs of God, which ſtings ungracious and wicked men; whereas in that other kind of happineſs, that of the Prophet commonly falls out, *They rejoyce and triumph; they ſacrifice unto their net, and burn incenſe unto their drag.* *Thirdly becauſe*, that which cometh unto us without our own abilities, yieldeth not that commendation and reputation. For Actions of great Felicity draw wonder, not praiſe; as *Cicero* ſaid to *Cæſar*. *Quæ miremur habemur, quæ laudemus expectamus.* *Fourthly.* becauſe the purchaſes of our own induſtry are joyned commonly with labour and ſtrife, which makes the fruition of our deſires more pleaſant, as ſaith *Solomon*, *Suavis cibus è venatu.*

Hab. 1.

Pro. M. Marcel.

The Reprehenſion.

BUt there are four *Contre-Colours* which encline the caſe to the contrary Part, and may be as Reprehenſions to the former *Colours*.

Firſt

First because Felicity seems to be a seal and character of Divine favour; *and accordingly begets both confidence and alacrity in our selves; and respect and authority from others:* And this Felicity comprehends many casualties, whereunto the power and providence of a man cannot aspire. As when *Cæsar* encouraging the Sayler, said *Cæsarem portas & fortunam ejus*; but if he had said, *Cæsarem portas & virtutem ejus*, it had been a cold comfort against a tempest. Suet. in Jul. *Secondly because that such things as proceed from virtue and industry, are imitable, and feasable by others to be practised; whereas Felicity is a thing inimitable, and a Prerogative of some few singular persons.* Wherefore we generally see, that things of Nature are preferr'd before things of Art, because they be inimitable: for what is imitable is in effect Prostitute and common. *Thirdly the Revenues of Felicity, seem to be no purchase of our own, but a Donative from others: but what is acquired by our own proper virtue is, as it were, bought at a price.* Whereupon *Plutarch* saith elegantly of the Arts of *Timoleon*, a man of all men most fortunate, compared with the Acts of *Agesilaus* and *Epaminondas* who lived in the same Age, *That they were like Homer's verses, which as they excell'd in other points, so they seem'd to have an easie native slide in them and to be conducted by a happy Genius.* In Timol. Fourthly *because what falls out beyond hope and expectation, insinuates it self more sweetly, and with greater delight, into the minds of men*; but this cannot be incident to those things, which proceed from our own care and compass.

The Colour.

12 "*What consists of many and divided parts, is greater than that which* "*consists of few Parts, and is more entire; for all things considered by* "*parts seem greater: wherefore both plurality of parts hath a shew of* "*Magnitude; and the same Plurality works more strongly, if it be pre-* "*sented unto us without order; for it induceth a resemblance of* Infinity, "*and hinders Comprehension.*

This *Colour* seems a *Fallax*, at first sight very palpable: for not the *Plurality of Parts* alone, but the *Majority*, may make the total Greater; yet nevertheless the *Colour* many times carryes the imagination away; yea, it deceives sense. For it seems to the eye, a shorter distance of way, if it be all dead and continued, so as nothing intercurr which may break the sight; than in such a coast or quarter, where there are Trees and Buildings, and other marks, which may measure and Divide the space. So when a great Monied-man hath divided and distributed his chests and bags into several and distinct rooms, he seemeth to himself richer than he was. Therefore a way to *Amplify* any thing, is to *break* it into *many Parts*, and to handle every part severally by it self. And this again will more fill the imagination, if it be done promiscuously and without order; for *confusion* raiseth an opinion of multitude; so what are presented and propounded in *order*, both seem to be more finite, and demonstrate that nothing is left out, but all is there: whereas on the contrary, whatsoever things are represented confusedly, are not only thought to be more numerous in themselves; but they leave a suspicion that more might be said than is expressed.

The Reprehenſion.

THe Fallax of this Colour is. *Firſt when a man doth over-conceive, or prejudicate of the greatneſs of any thing, comprehending it beyond the true limits of Magnitude; for then the breaking of it will make it ſeem leſs, and rectifie that falſe opinion, and preſent the object in its native verity, and not with amplification.* Wherefore if a man be in ſickneſs or in pain, the time will ſeem longer to him without a Clock or an Hour-glaſs, than if it were meaſured with them: for if the wearyſomeneſs, and vexation of a diſeaſe, make the time ſeem longer than in truth it is; yet the computation of time reforms that miſtake, and makes it ſhorter than that erroneous opinion conceived it to be. So in a dead Plain (whereof even now we gave a contrary inſtance) it ſometimes falls out; for though at firſt the eye preconceiv'd the way ſhorter, becauſe it was undivided, yet if upon this ſuppoſition, an opinion poſſeſs the imagination of a far ſhorter ſpace of ground than it proves to be, the fruſtrating of that vain conceit, makes it ſeem longer than the truth. Therefore if any man deſire to humour and ſecond the falſe opinion of another, touching the *greatneſs* of any thing, let him beware of diſtributions, and breaking it in ſeveral conſiderations, but let him out of hand extol the matter entire, and in the groſs. *Secondly this Colour deceives when the Diſtribution is diſtracted or ſcattered, or is not preſented entire, or doth not at once object it ſelf to the ſight.* Therefore if flowers in a Garden be divided into ſeveral beds, they will ſhew more than if they were all growing in one bed; ſo the Beds be within a plot that they be the object of view at once; otherwiſe, union is of more force in this caſe than ſcattered diſtribution. Therefore their Revenues ſeem greater, whoſe Lands and Livings lie together in one ſhire; for if they were diſperſed, they would not fall ſo eaſily within notice and comprehenſion. *Thirdly this Colour deceives in reſpect of the dignity of unity above multitude; for all compoſition is a ſure mark of deficiency, in particularities ſeverally conſidered, which thus pieces out one thing with the addition of another.*

Et quæ non proſunt ſingula, multa juvant.

Luk. 10. And therefore *Mary* had choſen the better part; *Martha, Martha, attendis ad plurima, unum ſufficit.* Hereupon *Æſop*, framed the fable of the *Fox* and the *Cat*. *The Fox bragged what a number of ſhifts and devices he had to get from the Hounds; the Cat ſaid ſhe had but one only way to truſt to, which was this; ſhe had a poor ſlender faculty in climbing up a tree:* which yet in proof was a ſurer guard then all Vulpone's policies and ſtratagems: whereof the proverb grew, *multa novit Vulpes, ſed Felis unum magnum*, the Fox knows many practices, but the Cat one ſpecial; one that will help at a dead lift. And in the Moral of this Fable it it comes likewiſe to paſs, *that a potent and faithful Friend, is a ſurer Card at a pinch than all the Plots and Policies of a man's own wit.*

Æſop.

And theſe ſhall ſuffice for example: we have an infinite nnmber more of *Colours*, of this nature, which we collected in our youth; but without

without their *Illuſtrations* and *Reprehenſions*, which at this time we have now leiſure to perfect and digeſt; wherefore we thought it incongruous to expoſe thoſe *Colours* naked, without their *Illuſtrations*, ſeeing theſe other come abroad attired. Yet thus much in the mean time we admoniſh, that this branch of knowledge, in our judgement, whatſoever it may ſeem, is of no contemptible conſequence, but a matter of high price and uſe, as that which participates both of *Primitive Philoſophy*, of *Policy*, and of *Rhetorick*. Thus much of popular marks, or of the *Colours of Good and Evil in apparence*, as well *ſimple as comparative*.

III. A ſecond collection, which appertains to a ready *proviſion*, or *preparatory ſtore*, is that which *Cicero* intimates (as we have noted before in *Logick*) where he gives it in Precept, that we have *Common-places* in ready preparation argued and handled *Pro* and *Contra*; ſuch as are, *For the words and letters of Law*, *for the ſence and mind of Law*, and the like. And we extend this Precept to other things alſo; as that it may be applied, not only to *Judicial* Forms; but to *Deliberative* and *Demonſtrative* alſo. Generally this is it we would have done; namely, that we have all *places*, whereof there is more frequent uſe (*whether we reſpect Probations and Confutations, or Perſwaſions and Diſſwaſions, or Praiſes and Vituperations*;) ſtudied and meditated beforehand, and the ſame extoll'd and depreſſed by the higheſt ſtrains of Wit and Invention; and perverſely wreſted, as it were, of purpoſe utterly beyond Truth. And in our opinion the manner of this *Collection*, as well for uſe as for brevity, would be the beſt, if ſuch common-places, and ſeeds of ſeveral Arguments were abridg'd and caſt up into ſome brief and acute ſentences, as into Skains or Bottoms of Thread to be drawn out, and unwinded into larger Diſcourſes as occaſion ſhould be preſented. A *Collection in this nature* we find in *Seneca*, but in ſuppoſitions only, or Caſes. Of this ſort (in regard we have many ready prepared) we thought good to ſet down ſome of them for example: Theſe we call *Antitheta Rerum*.

ANTITHETA RERUM, Cicero.

Sen. Contro.

Examples of the *Antitheta*.

NOBILITY. I.

Pro.	Contra.
They whoſe vertue is altogether deriv'd from the ſtock; theſe not only have not a will, but want a power to be wicked.	*Nobility ſeldom ſprings from Vertue; Vertue more ſeldom from Nobility.*
Nobility is a Garland of Bays, wherewith time Crowns men.	*Nobles by birth more often uſe the interceſſion of their Anceſtors for Pardon, than their ſuffrage for Honours.*
We reverence Antiquity even in dead Monuments, how much more in living.	*The induſtry of new riſing men is oftentimes ſuch, as* Nobles *compar'd with them are but* Statues.

If you regard not the Honour of an ancient Houſe: Then what difference will there be between the Race of Men, and the Race of Beaſts?

Nobility removes Vertue from Envy; recommends it to Grace and Favour.

Nobles by blood, look too often back in the courſe; which is the quality of an ill Racer.

BEAUTY. II.

Pro.

Deformed perſons commonly have their revenge of Nature.

Vertue is nothing elſe but inward Beauty; and Beauty nothing elſe but an outward Vertue.

Deformed perſons ſeek to reſcue themſelves from ſcorn, by malice and boldneſs.

Beauty makes Vertues ſhine, vices bluſh.

Contra.

Vertue is like a rich Stone, beſt plain ſet.

What a fair veſtment is to a deformed Body, the ſame is a comely Body to a deformed Mind.

They uſually are of no great parts, whom Beauty commendeth or moveth.

YOUTH. III.

Pro.

Our firſt cogitations, and the counſels of Youth ſtream more divinely.

Old men are more wiſe for themſelves, than they are for others and the Repub.

If it could be made viſible, Old age doth more deform the mind than the body.

Old men fear all things ſave the Gods.

Contra.

Youth *is the field of Repentance.*

There is in Youth an inbred diſeſteem of the Authority of Age, that every one may grow wiſe at his own peril.

Thoſe Counſels to which Time was not call'd, Time will not ratifie.

In old men Venus *is changed into the* Graces.

HEALTH. IV.

Pro.

The regard of Health makes the Mind humble, and obſequious to the Body.

A ſound Body is the Souls Hoſt, *but a ſickly her* Jaylor.

Nothing ſo promotes the ſumm of Buſineſs, as a proſperous ſtate of Body; but on the contrary, a ſickly conſtitution makes too many Holy-days.

Contra.

Often to recover health, is often to grow young again.

Indiſpoſition *of* Health *is a common excuſe, hither we fly even when we are well.*

Health unites the Soul and the Body in too ſtrict a league.

The Couch hath govern'd mighty Empires; and Litter mighty Armies

WIFE and CHILDREN.

Pro.	Contra.
Charity to the Common-wealth, begins at a private Family.	*He that hath Wife and Children, hath given Hoſtages to Fortune.*
Wife and Children are a kind of Diſcipline of Humanity; but unmarried men are cruel and hard-hearted.	*Generation and Iſſue are Humane Acts; Creation and its Works are Acts Divine.*
Single life and a Childleſs ſtate, are good for nothing but for flight.	*Iſſue is the Eternity of Beaſts, Fame, Merit, and wholeſome Precepts, the Eternity of Men.*
He that procreates no Children, ſacrificeth to Death.	*Oeconomical reſpects many times ſupplant Political Duties.*
They that are happy in all other things, are commonly unfortunate in their Children: leſt being men they ſhould approach too near to a condition Divine.	*To ſome Natures the Fortune of* Priamus *is acceptable, who ſurviv'd his whole Poſterity.*

RICHES. VI.

Pro.	Contra.
They deſpiſe Riches, that diſpair of them.	*Of great Riches, there is either a cuſtody, or a diſpenſation, or a fame; but no ſolid uſe.*
An envy conceiv'd againſt Riches, hath extolled Vertue to a Deity.	*Do you not ſee what feigned priſes are ſet upon little Stones, and ſuch kind of Rarities, that there may be ſome uſe made of great Riches?*
Whilſt Philoſopers call in doubt whether all things are to be referr'd to Vertue or Pleaſure; ſurvey the inſtruments of them both.	*Many, whilſt they have entertain'd an opinion that all things might be bought with their money; have in this conceit, firſt ſold themſelves.*
Vertue, by means of Riches, is converted into a common good.	*I cannot call Riches better than the Baggage of Vertue; for they are both neceſſary to Virtue, and yet comberſome, hindring the March.*
All other kinds of Good have a provincial command, only Riches a general.	*Riches are a good Hand-maid, but the worſt Miſtreſs.*

HONOURS. VII.

Pro.	Contra.
Honours are not ſuffrages of Tyrants, but of Divine Providence.	*Whilſt we ſeek Honours, we looſe liberty.*
Honours make both Vertues and Vices conſpicuous; therefore thoſe	*Honours commonly give men a power over thoſe things, wherein*

they

they excite, these they repress.

No man can tell what proficience he hath made in the Race of Vertue, unless Honours afford him an open Field.

The motion of Vertue as of other things, is violent to its place, calm in its place; and the place of Vertue is Honour.

the best condition is, not to will; the next not to can.

The stairs to Honours are steep, the standing slippery, the regress a downfal.

They that are in great place had need to borrow other mens opinions, to think themselves happy.

EMPIRE. VIII.

Pro.

It is a great blessing to enjoy Happiness; but to have the power to confer it on others, is far greater.

Kings are rather like stars than men; for they have a powerful influx upon all men, and upon times themselves.

To resist God's vicegerents, is not only the guilt of Treason, but a kind of Theomachie.

Contra.

What a miserable state is it, to have a few things to desire, infinite things to fear!

Princes are like heavenly bodies which have much veneration, but no rest.

None of Humane condition is admitted to the Banquet of the Gods, but to his reproach.

PRAISE, REPUTATION. IX.

Pro.

Praises are the reflexed Beams of Vertue.

That praise is an Honour which comes from voices freely conferr'd.

Many States confer Honours; but Praises are every where the Attributes of Liberty.

The voice of the people hath some divineness in it; else how should so many men agree to be of one mind?

You need not wonder if the communalty speak more truly than the Nobility; for they speak more safely.

Pro.

Fame is a better Nuncio than a Judge.

What hath a good man to do with the dull approbation of the vulgar?

Fame like a River bears up things light and swoln; drowns things weighty and solid.

The lowest vertues draw praise from the common people; the middle vertues work in them Astonishment or Admiration; but of the highest Vertues they have no sence or perceiving at all.

Praise proceeds more out of a bravery than out of merit; and happens rather to vain and windy persons, than to persons substantial and solid.

NATURE. X.

Pro.

The Progress of Custom is Arithmetical; of Nature Geometrical.

Contra.

Mens thoughts are according to Nature; their words according to

As

As Laws are to Cuſtom in Civil States, ſo is Nature to Cuſtom in every particular perſon.

Cuſtom againſt Nature is a kind of Tyranny, and is quickly and upon light occaſion oppreſſed.

Precept; but their deeds according to cuſtom.

Nature is a kind of Pedant; Cuſtom a Magiſtrate.

FORTUNE. XI.

Pro.

Ouvert and apparent vertues bring forth praiſe; ſecret and hidden vertues bring forth fortune.

Vertues of duty bring forth praiſe; vertues of ability bring forth fortune.

The way of Fortune is like the milken way in the ſkie; which is a meeting or knot of certain ſmall obſcure vertues without a name.

Fortune is to be honour'd and reſpected, and it be but for her daughters confidence *and* reputation.

Contra.

The folly of one man, is the fortune of another.

In Fortune this I may chiefly commend, that being ſhe makes no election, ſhe gives no protection.

Men of place and quality while they decline the envy of their own vertues; have been found among the worſhippers of Fortune.

LIFE. XII.

Pro.

It is a fooliſh and prepoſterous affection, to love the Acceſſories of life, more than life it ſelf.

A full courſe is better than a ſhort; a fair advantage to all things, yea even to vertue.

Without a good ſpacious compaſs of life, we can neither fully perfect, nor learn, nor repent.

Contra.

The Philoſophers, whilſt they raiſe ſo great preparations againſt Death, have made it but appear more terrible.

Men fear Death becauſe they know it not; as Children fear the dark.

You can find no paſſion in the mind of man ſo weak, which if it be but a little preſt, maſters not the fear of death.

To be willing to die, not only a valiant man, or a miſerable man may, or a wiſe; but even a faſtidious man, and a coward may do as much.

SUPER-

SUPERSTITION. XIII.

Pro.

They that err out of a well meant zeal, may not be approved, but yet may be beloved.

Mediocrities are due to Moral vertues; extremities to divine.

A ſuperſtitious man is a religious Formaliſt.

I ſhould ſooner believe all the Fabulous wonders of any Religon, than that this univerſal Frame was built without a Deity.

Contra.

As it adds deformity unto an Ape, to be ſo like a man; ſo the ſimilitude of ſupeſtition to Religion, makes it more deform'd.

Look how odious Affectation is in matters Civil; ſo hateful is ſuperſtition, in matters Divine.

It were better to have no opinion of God at all, than ſuch an opinion as is reproachful unto him.

It is not the School of Epicurus, *but the Porch of the* Stoicks *that hath perturbed ancient States.*

It cannot come into the mind of man to be a mere Atheiſt in Opinion; but your great Hypocrites are the true Atheiſts, who are ever handling holy things, but never revere them.

PRIDE. XIV.

Pro.

Pride is even with vices incompetible: And as poyſon is expelled by poyſon, ſo many vices are by pride.

A ſoft nature becomes guilty of the crimes of others; but a proud ſpirit only of his own.

Pride if it aſcend from contempt of others to a contempt of itſelf, at laſt is chang'd into Philoſophy.

Contra.

Pride is the inſinuating Ivie to Vertues, and all good Qualities.

All other vices are only contrary to vertues, pride alone is contagious.

Pride wants the beſt condition of vice, that is, concealment.

A proud man while he deſpiſeth others, prejudiceth himſelf.

INGRATITUDE. XV.

Pro.

The guilt of ingratitude is nothing elſe but a too preciſe conſideration and inquiſition into the cauſe of a benefit conferr'd.

Whilſt we endeavour to be grateful to others, we neither perform

Contra.

The crime of Ingratitude is not to be repreſſed by puniſhments, but to referred over to the Furies.

The obligations of benefits are more ſtrict than of Duties, where-

juſtice

juſtice to others, nor reſerve liberty to our ſelves.

Where the valuation of a Benefit is uncertain, there the leſs thank is due.

fore he that is unthankfull is unjuſt, and any thing.

Such is man's condition; no man is born to ſo high a fortune, but that he is a debtor to the retribution both of Private thanks, and perſonal revenge.

ENVY. XVI.

Pro.

It is natural for a man to hate the reproach of his Fortune.

Envy in a ſtate is a wholſome Oſtraciſm.

Contra.

Envy never makes Holyday.

Nothing but death reconciles Envy to virtue.

Envy doth put vertue to it, as Juno *did* Hercules.

INCONTINENCE. XVII.

Pro.

Chaſtity may thank Jealouſie that ſhe is become a virtue.

He had need be endued with much Gravity, that makes the ſports of Venus any matter of Earneſt.

Why do you place either a ſpare diet, or a ſhew of Honeſty, or the Daughter of Pride, amongſt the virtues?

Of loves, as of wild fowl, there is no property; but the right is paſt over with the poſſeſſion.

Contra.

Incontinence is one of Circes *her worſt transformations.*

An unchaſt liver hath utterly loſt a reverence to himſelf, which is the bridle of all vice.

They that with Paris, *make beauty their wiſh, loſe, as he did, Wiſdom and Honour.*

Alexander *fell upon no popular truth, when he ſaid, that ſleep and luſt were the earneſts of Death.*

CRUELTY. XVIII.

Pro.

No virtue is ſo often guilty as clemency.

Cruelty if it proceed from revenge, it is juſtice; if from Peril it is wiſdom.

He that ſhews mercy to his enemy, denyes it to himſelf.

Phlebotomy is not more neceſſary in the Body Natural, than it is in the body Politick.

Contra.

He that delights in blood, is either a wild beaſt or a Fury.

Cruelty to a Good man, ſeems to be but a Fable, and ſome Tragical fiction.

VAIN-GLORY. XIX.

Pro.

He that ſeeks his own praiſe, withal ſeeks the profit of others.

He that is ſo reſerv'd, as to regard nothing that is forreign; it may be ſuſpected, that he will account publick affairs, forreign impertinencies.

Such Diſpoſitions as have a commixture of Levity in them, more eaſily undertake a publick charge.

Contra.

Vain-glorious perſons are always factious, lyers, inconſtant, overdoing.

Thraſo *is* Gnatho's *prey.*

It is a ſhame for a Lover to make ſuit to the hand-maid; but Praiſe is vertues hand-maid.

JUSTICE. XX.

Pro.

Kingdoms and States are only the Appendices of Juſtice: for if Juſtice otherwiſe could be executed, there would be no need of them.

It is the effect of Juſtice, that man is to man a God, and not a Wolf.

Though Juſtice cannot extirpate Vice; yet it repreſſeth it from doing hurt.

Contra.

If this be to be juſt, not to do to another what you would not have done to your ſelf; then is mercy Juſtice.

If we muſt give every one his due, then ſurely pardon to Humanity.

What tell you me of equity when to a wiſe man all things are unequal?

Do but conſider what the condition of the guilty was in the Roman State; and then ſay Juſtice is not for the Republick.

The common Juſtice of States is as a Philoſopher in Court; that is, it makes only for a reverential reſpect of ſuch as bear Rule.

FORTITUDE. XXI.

Pro.

Nothing but fear is terrible. There is nothing ſolid in pleaſure, nor aſſur'd in vertue, where fear diſquiets.

Contra.

That's a goodly vertue to be willing to dye, ſo you may be ſure to kill.

He that confronts dangers with open eyes, that he may receive the charge; marketh how to avoid the same.

All other vertues, free us from the Dominion of Vice; only Fortitude from the Dominion of Fortune.

That's a goodly vertue sure, which even drunkenness may induce.

He that is prodigal of his own life, will not spare the life of another.

Fortitude is a vertue of the Iron Age.

TEMPERANCE. XXII.

Pro.

To abstain *and to* sustain, *are vertues proceeding commonly from the same habit.*

Uniformities, concords, and measures of motions, are things celestial, and the characters of Eternity.

Temperance as wholesome colds, concentrate and strengthen the forces of the Mind.

Too exquisite and wandring senses, had need of Narcoticks; and so likewise wandring affections.

Contra.

I like not these negative vertues; for they argue Innocence not Merit.

That mind languisheth which is not sometimes spirited by excess.

I like those vertues which induce the vivacity of Action, and not the dulness of Passion.

When you set down the equal tempers of the mind, you set down but few; nam pauperis est numerare pecus.

These Stoicisms (not to use that so you may not desire; not to desire that so you may not fear) are the resolutions of pusillanimous, and distrustful natures.

CONSTANCY. XXIII.

Pro.

Constancy is the foundation of vertue.

He is a miserable man that hath no perception of his future state, what it shall or may be.

Seeing man's judgement is so weak, as that he cannot be constant to things; let him at least be true to himself, and to his own designs.

Constancy gives reputation even to vice.

If to the Inconstancy of Fortune we add also the inconstancy of mind, in what mazes of darkness do we live.

Contra.

Constancy like a sullen-self-will'd Portereſs, drives away many fruitful informations.

There is good reason that Constancy should patiently endure crosses, for commonly she causeth them.

The shortest folly is the best.

Fortune is like Proteus, *if you perſiſt, ſhe returns to her true ſhape.*

MAGNANIMITY. XXIV.

Pro.

When once the mind hath propounded to it ſelf honourable ends; then not only vertues, but even the Divine powers are ready to ſecond.

Vertues ſpringing from Habit or Precept, are vulgar; but from the end heroical.

Contra.

Magnanimity is a vertue Poetical.

KNOWLEDGE, CONTEMPLATION. XXV.

Pro.

That delight only is according to Nature, whereof there is no ſatiety.

The ſweeteſt proſpect is that, which looks into the errors of others, in the vale below.

How pleaſing and profitable a thing is it, to have the orbs of the mind concentrick, with the orbs of the World.

All depraved affections are falſe valuations; but goodneſs and truth are ever the ſame.

Contra.

A contemplative life is a ſpecious ſloth.

To think well is little better than to dream well.

The divine providence regards the world; thou thy country.

A right Politick procreates Contemplations.

LEARNING. XXVI.

Pro.

Reading is a converſe with the wiſe; Action, for the moſt part, a commerce with fools.

Thoſe Sciences are not to be reputed altogether unprofitable, that are of no uſe; if they ſharpen the wits, and marſhal our conceptions.

Contra.

To be wiſe from Precept and from Experience, are two contrary habits; ſo as he that is accuſtomed to the one, is inept for the other.

There is many times a vain uſe of Art, leſt there ſhould be no uſe.

This commonly is the humour of all Scholars, that they are wont to acknowledge all they know; but not to learn what they know not.

PROMP-

PROMPTITUDE. XXVII.

Pro.

That is not ſeaſonable wiſdom, which is not quick and nimble.

He that quickly errs, quickly reforms his error.

He that is wiſe upon deliberation, and not upon preſent occaſion; performs no great matter.

Contra.

That wiſdom is not far fetcht, nor deeply grounded, which is ready at hand.

Wiſdom is as a Veſtment, that is lighteſt, which is readieſt.

Age doth not ripen their wiſdom, whoſe counſels deliberation doth not ripen.

What is ſuddenly invented, ſuddenly vaniſheth; ſoon ripe ſoon rotten.

Silence in matters of Secrecy. XXVIII.

Pro.

From a ſilent man, nothing is conceal'd; for all is there ſafely laid up.

He that eaſily talks what he knows, will alſo talk what he knows not.

Myſteries are due to ſecrecies.

Contra.

Alteration of Cuſtoms placeth the mind in the dark; and makes men go inviſible.

Secrecy is the vertue of a Confeſſor.

From a ſilent man all things are conceal'd, becauſe all is repai'd with ſilence.

A cloſe man is next to an unknown man.

FACILITY. XXIX.

Pro.

I like the man that is pliant to another's inclination, but yet reſerves his judgement from flattery.

He that is flexible comes neareſt to the nature of Gold.

Contra.

Facility is a weak privation of judgement.

The good offices of facile natures ſeem debts; their denials, injuries.

He owes the thanks to himſelf, that obtains any thing of a facile-natur'd man.

All difficulties preſs upon a too acceſſible and yielding nature; for he ingages himſelf in all.

Facile natures ſeldom come off with credit.

POPULARITY. XXX.

Pro.

The ſame things commonly pleaſe wiſe men, but it is alſo a point of wiſdom; to humour the changeable diſpoſition of fools.

To honour the people is to be honoured.

Men in place uſually ſtand in awe, not of one man; but the multitude.

Contra.

He whoſe nature rightly ſorts with fools, may himſelf be ſuſpected.

He that hath the Art to pleaſe the people; commonly hath the power to raiſe the people.

No terms of moderation takes place with the vulgar.

To fawn on the people, is the loweſt degree of Flattery.

LOQUACITY. XXXI.

Pro.

Silence argues a man to be jealous, either of others, or of himſelf.

Reſtraint of liberty in what kind ſoever is an unhappy caſe, but the worſt of all is that of ſilence.

Silence is the vertue of fools; where he ſaid truly to a ſilent man, If you be wiſe you are a Fool; if you be a Fool you are wiſe.

Silence like night is fit for Treacheries.

Cogitations are like waters, moſt wholeſome in the running ſtream.

Silence is a kind of ſolitude.

He that is ſilent proſtitutes himſelf to cenſure.

Silence neither diſchargeth it ſelf of Evil thoughts, nor contributes any good.

Contra.

Silence adds grace and authority to a man's words.

Silence like a kindly ſleep refreſheth wiſdom, and ſettles the judgement.

Silence is the Fermentation of our thoughts.

Silence is the ſtile of wiſdom.

Silence is a candidate for Truth.

DISSIMULATION. XXXII.

Pro.

Diſſimulation is a compendious wiſdom.

We are not tied to ſay the ſame, but to intend the ſame.

Nakedneſs even in the Mind is uncomely.

Diſſimulation is both a Grace and a Guard.

Diſſimulation is the fence of counſels.

Some through their too apert fair dealing become a prey.

He that carries all things with an open frankneſs deceives, as he that ſomewhat diſſembles: for many either do not comprehend him, or do not believe him.

Open dealing is nothing elſe but a weakneſs of mind.

Contra.

When we cannot think according to the verity of things, yet at leaſt let us ſpeak according as we think.

Whoſe ſhallow capacities comprehend not the Arts of State; in them, a habit of diſſimulation goes for wiſdom.

He that Diſſembles, deprives himſelf of one of the moſt principal inſtruments for Action, which is belief.

Diſſimulation invites Diſſimulation.

A diſſembler is not exempt from bondage.

BOLDNESS XXXIII.

Pro.

A ſhamefac'd ſuitor teaches the way how to be denied.

What Action is to an Orator, the ſame is boldneſs to a Politick; the firſt, the ſecond, the third vertue.

I love him that confeſſeth his modeſty, but I cannot endure him that accuſeth it.

A confidence in carriage ſooneſt unites affections.

I like a reſerved countenance, and an open ſpeech.

Contra.

Boldneſs is the Verger to folly.

Impudence is good for nothing but for Impoſture.

Confidence is the fool's Empreſs, and the wiſe man's buffoon.

Boldneſs is a kind of Dulneſs of ſenſe, together with a perverſeneſs of will.

Ceremonies, Puntoes, Affectation. XXXIV.

Pro.

A comely moderation of Countenance and Geſture, is the true ſeaſoning vertue.

Contra.

What can be a more deformed ſpectacle, than to transfer the ſenſe into our common courſe of life?

If we obſerve the vulgar in the uſe of Words, why not in Habit and Geſture?

He that keeps not a decorum in ſmaller matters, and in his daily cuſtoms, though he be a great man, yet ſet it down for truth; that ſuch a perſonage is wiſe, but at certain ſeaſons.

Vertue and wiſdom, without all points of reſpect and complement, are like forreign languages, they are not underſtood by the common people.

He that apprehends not the meaning of the common people, neither by a congruous application, nor yet by obſervation, is of all men moſt ſenſeleſs.

Puntoes and ceremonies are the tranſlation of vertue into a mother-tongue.

Fair ingenious behaviour wins grace and favour; but affectation and art procures hatred.

Better a painted face and criſped hair; than painted and criſped manners.

He cannot comprehend great matters, who breaks his mind to ſmall obſervations.

Affectation is the ſhining Putrefaction of ingenuity.

JESTS. XXXV.

Pro.

A conceit is the altar of an Orator.

He that mingles modeſt mirth in all his commerce with others, reſerves a freedom of mind.

It is a matter more politick, than a man would think, ſmoothly to paſs from jeſt to earneſt, and from earneſt to jeſt.

A witty conceit is oftentimes a convoy of a Truth, which otherwiſe could not ſo handſomely have been ferried over.

Contra.

What man deſpiſeth not thoſe that hunt after theſe deformities and concinnities?

To put off the importance of buſineſs with a jeſt, is a baſe ſlight of wit.

Then judge of a jeſt, when you have done laughing.

Merrily conceited men, ſeldom penetrate farther than the ſuperficies of things, which is the point where the jeſt lies.

To put a jeſt, as a matter of moment upon ſerious affairs, is a childiſh Levity.

LOVE. XXXVI.

Pro.

Do you not ſee how all men ſeek themſelves, but a lover only finds himſelf.

Contra.

The ſtage is much beholding to love; the life of man nothing.

There is no better government of the mind, than from the command of ſome powerful affection.

He that is wiſe, let him purſue ſome deſire or other; for he that doth not affect ſome one thing in chief, unto him all things are diſtaſtful and tedious.

Why ſhould not that which is one, reſt in unity?

There is nothing hath ſo many names as Love; for it is a thing either ſo fooliſh, that it knows not it ſelf, or ſo baſe that it muſt needs diſguiſe it ſelf under a counterfeit habit.

I like not ſuch natures as are only intent upon one thing.

Love is a poor narrow contemplation.

FRIENDSHIP. XXXVII.

Pro.

Friendſhip accompliſheth the ſame things that Fortitude doth, but more ſweetly.

Friendſhip is a pleaſant ſauce to any temporal happineſs.

The worſt ſolitude is to be deſtitute of ſincere friendſhip.

It is a juſt puniſhment for falſe-hearted diſpoſitions, to be deprived of friendſhip.

Contra.

Who contracts ſtrict leagues of Amity, draws upon himſelf new engagements.

It is a note of a weak ſpirit to divide fortune.

FLATTERY. XXXVIII.

Pro.

Flattery proceeds more out of cuſtom than out of Malice.

It was ever a form of civility due to Great Perſons, by praiſing them to inſtruct them.

Contra.

Flattery is the ſtile of Servants.

Flattery is the cement of vice.

Flattery is that kind of fowling, which deceives Birds, by reſemblance of voice.

The deformity of flattery is Comical, but the dammage Tragical.

To give wholeſome counſel, is a task moſt difficult.

REVENGE. XXXIX.

Pro.

Private Revenge is a kind of wild Juſtice.

He that returns wrong for wrong, violates the Law, not the Perſon.

Contra.

He that does a wrong, is the beginner of a quarrel, but he that retaliates, takes away all means of ending it.

Revenge by how much the more natural, by ſo much the more to be repreſſed.

The fear of Private revenge is a profitable reſtraint, for laws are too often aſleep.

He that is inclinable to retribute a wrong, is behind-hand perchance in time, but not in will.

INNOVATION. XL.

Pro.

Every medicine is an innovation.

He that will not apply new remedies, muſt expect new diſeaſes.

Time is the greateſt innovator; why then may we not imitate time.

Ancient preſidents are inconformable, recent, corrupt, and degenerate.

Let ſimple and contentious perſons, ſquare their actions, according to examples.

As thoſe that firſt bring honour into their Family, are commonly more worthy than moſt that ſucceed: So the Innovation of things for the moſt part excells thoſe things which are done out of Imitation.

A froward retention of Cuſtoms, is as turbulent a thing as Innovation.

Seeing that things of their own courſe alter to the worſe, if they be not by counſel altered to the better, what ſhall be the end of Evil.

The ſervants of cuſtom, are the ſcorn of Time.

Contra.

New Births are deformed things.

No author is accepted, until time have authoriz'd him.

All novelty is with injury, for it defaceth the preſent ſtate of things.

Thoſe things which cuſtom hath confirmed, if they be not profitable, yet they are conformable and piece well together.

What Novator follows the example of time, which inſinuates innovations ſo quietly, as is ſcarce perceptible to ſenſe.

Whatſoever comes unlooked for, is the leſs acceptable to him whom it helps; and the more troubleſome to him whom it hurts.

DELAY. XLI.

Pro.

Fortune ſelleth many things to the haſty; which ſhe gives to the ſlow and deliberate.

Whilſt we make too much haſt to ſurprize the beginnings and onſets of things, we claſp ſhadows.

Whilſt things are at a doubtful ſtand, we muſt weigh them; when they incline we may fall a work.

It is good to commit the beginning of Actions to Argus, *with his hundred eyes; the ends to* Briareus, *with his hundred hands.*

Contra.

Occaſion turns the handle of the Bottle firſt, to be received; and after the belly.

Occaſion, like Sybilla, *diminiſheth the commodity, but enhanceth the Price.*

Celerity is the helmet of Pluto.

Thoſe things which are ſeaſonably undertaken, are performed with judgement; but what are put off too long, are compaſs'd with trouble and by ambages.

PRE-

PREPARATION. XLII.

Pro.

He that attempts a great matter with ſmall means; fancies to himſelf the advantage of opportunity, that he may not deſpair.

With ſlender proviſion we buy wit not fortune.

Contra.

The firſt occaſion of action, is the beſt point of preparation.

Let no man think to fetter fortune, with the chains of his preparation.

The alteration of preparation, and action, are politick Arts; but the ſeperation of them is a vaporous conceit, and unproſperous.

Great preparation is a prodigal both of time and buſineſs.

To Encounter firſt Aſſaults. XLIII.

Pro.

More dangers deceive us by fraud, than overcome us by force.

It is leſs trouble to meet danger by early remedies, than to watch and ward the approaches and progreſs thereof.

A danger is no more light, if it once ſeem light.

Contra.

He teacheth danger to come on, who over-early addreſſeth himſelf againſt danger; and fixeth it by application of a remedy.

In the redreſs of dangers, lighter dangers fall off of themſelves

It is better to deal with a few authentick and approv'd remedies; than to venture upon a world of unexperienc'd particular receipts.

VIOLENT COUNSELS. XLIV.

Pro.

Thoſe that affect a mild and gentle kind of Prudence; to them the augmentation of an evil is a wholeſome remedy.

That neceſſity which reſolves upon deſperate courſes; commonly goes through with them.

Contra.

Every violent remedy is pregnant of a new evil.

No man gives violent advice, but out of fury or fear.

SUSPICION. XLV.

Pro.	Contra.
Diffidence is the nerves of wiſdom; but ſuſpicion a remedy for the joynts.	*Suſpition breaks the bond of faith.*
That ſincerity is juſtly ſuſpected, which ſuſpicion weakens or overthrows.	*The diſtemper of ſuſpicion, is a kind of Civil Madneſs.*
Suſpicion defeats an inconſtant integrity; but confirms a ſtrong and reſolute.	

The words of Law. XLVI.

Pro.	Contra.
It is no expoſition, but a divination, which departs from the letter.	*Out of all the words in the generality, ſuch a ſence muſt be extracted, as may expound the mind of every particular paſſage.*
When there is made a departure from the Letter of Law; the Judge, of an Interpreter, becomes a Lawgiver.	*The worſt tyranny, is Law upon the rack.*

For Witneſſes againſt Arguments. XLVII.

Pro.	Contra.
He that relies upon Arguments, defines according to the pleader, not according to the cauſe.	*If proofs by witneſs, are to be preferr'd before Proofs from Reaſon. then there needs no more ado, but that the Judge be not deaf.*
He that gives credit rather to Arguments than Witneſs, muſt withall truſt more to Wit than ſenſe.	*Arguments are an Antidote againſt the Poyſon of Teſtimonies.*
It were a ſafe way to believe Arguments of Reaſon, if men were not guilty of Abſurdities againſt Reaſon.	*Thoſe kind of Proofs are moſt ſafely believed, which do moſt ſeldom lye.*
Arguments brought againſt Teſtimonies accompliſh thus much; that the caſe ſeems ſtrange, but not that it ſeems true.	

Now

Now these *Antitheta* which we have propounded, are not perchance so much worth; but being they were prepared and collected by us long ago, we were loath the diligence of our youth should perish: specially seeing they are (if one exactly consider them) *Seeds, and not Flowers.* But herein they do plainly breath a youthly heat, in that they are so plentiful in the *Moral* or *Demonstrative* kind, so thin and sparing in the *Deliberative* and *Judicial.*

IV. A third Collection which pertains to *preparatory store* or *Provision*, and is *Deficient*, is that which we think fit to call *Formulæ Minores, Lesser Forms or Stiles of Speech.* And these are (as it were) the Portals, Postern-doors, outer-Rooms, back-Rooms, Passages of Speech, and the like; which indifferently may serve for all Subjects. Such are *Prefaces, Conclusions, Digressions, Transitions, Promises, Excusations*, and many of like nature. *For as in Building* there is great pleasure and use in the well-casting of the Frontispieces, Stair-cases, Doors, Windows, Entries, Passages, and the like: so in speech if the accessory conveyances and interposures be decently and skilfully contrived and placed, they are of special ornament and effect, to the whole structure of the speech. Of these *Formulæ*, we will propose an example or two, and stay no longer upon them. For although they be Matters of no small use, yet because we add nothing here of our own, but describe the naked *Forms* only, out of *Demosthenes* or *Cicero*, or some other select Author, they may seem a more trivial and common observation, than that we should waste much time therein.

* FORMULÆ MINORES.

Examples of Minor Forms.

A Conclusion of a Speech Deliberative.

"*So we may both redeem the fault which is passed, and with the same diligence provide against future inconveniences.*

The Corollary of an accurate Partition.

"*That every one may understand that I seek not to balk any thing by silence, or to cloud any thing by words.*

A Transition with a Caveat.

But let us so pass by these, that reflecting upon them, and keeping them within view, we may leave them.

A preoccupation against an inveterate opinion.

I shall so open the matter as you may understand in the whole manage of the business, what the case it self hath brought forth; what error hath fastned upon it; what envy hath rais'd. And let these suffice for example, wherewith (annexing two *Rhetorical Appendices*) which respect the *Promptuary Part* we conclude.

CHAP.

CHAP. IV.

I. *Two General Appendices of the Art of Delivery, Art* Critical. *And* Pedantical.

THere remains two *Appendices* in general, *touching the Tradition of Knowledge; the one Critical; the other Pedantical.* For as the principal part of *Tradition of Knowledge* conſiſteth in writing of Books; ſo the relative part thereof conſiſts in reading of Books: but reading is governed and directed, either by the help of Preceptors and Tutors; or perfected by every man's particular and proper endeavour and induſtry: and to this purpoſe conduce thoſe two knowledges, whereof we have ſpoken. *To the Critical part appertains; firſt, an immaculate correction and amended edition of approved Authors:* Whereby both the honour of Authors themſelves is vindicated, and a light given to the ſtudious Readers. Wherein nevertheleſs, the raſh diligence of ſome Writers hath done great prejudice to Studies. For it is the manner of many Criticks, when they fall upon a paſſage which they do not underſtand, preſently to preſume a fault in the Copy. As in that place in *Tacitus*, when a certain Colony in the open Senate, claimed the priviledge of an *Aſylum*, *Tacitus* reports that the reaſons they preferr'd were not much favour'd by the Emperour and the Lords of the Senate; wherefore the Embaſſadors miſtruſting the iſſue of the buſineſs, gave a round ſumm of mony to *Titus Vinius*, that he would mediate their cauſe, and take upon him the protection of their liberties; by this means their petition was heard and granted; *Tum dignitas & antiquitas Coloniæ valuit*, ſaith *Tacitus*, as if the arguments that ſeemed light before, were now made weighty through bribes and corruption. But one of the Criticks, a man of no obſcure note, hath expunged the word *Tum*, and in ſtead thereof, put in *Tantum.* And by this perverſe cuſtom of *Criticks*, it comes to paſs (as one wiſely noteth) *that the moſt corrected copies are commonly the leaſt correct.* Nay, (to ſpeak truth) unleſs the *Criticks* be well skill'd in the knowledges handled in the Books which they ſet forth, their diligence is with peril and prejudice. *Secondly, their appertains to the Critick Art, the Expoſition, and Explication of Authors, by Commentaries, Scholies, Notes, Spicilegies, and the like.* In labours of this kind, that worſt diſeaſe of *Criticks* hath ſeis'd on many; that they blanch and wave many obſcurer paſſages; and ſuch as are plain and perſpicuous, thoſe they dwell and expatiate upon, even to a faſtidious tediouſneſs; and it is not ſo much intended, that the Author may be illuminated, as that the *Critick* may take occaſion hereby to glorifie himſelf in his multiplicious and various learning. It could be eſpecially wiſhed (although this point belongs to *Tradition* in chief, and not to *Appendices*) that the Writer which handles obſcure and noble Arguments, ſhould annex his own *explications*; that neither the Text it ſelf may be broken off, by *Digreſſions* and *Explications*; and that the Annotations may not depart from the mind and intention of the Writer. Some ſuch thing we conceive of *Theon* upon *Euclid.*

Thirdly

Thirdly it belongs to Critick Art (from whence it derives the name) *to interpose a brief censure and judgement of the Authors which they publish, and to compare and value them with other Authors upon the same subject:* That by such a censure the Learned and Studious, may be both advertis'd of the choice of Books; and come better provided to the perusing of them. This last duty is, as it were, *the Chair of the Criticks*, which many great and famous men in our age have ennobled; greater surely in our judgement, than for the model of *Criticks*.

II. *For Pedantical knowledge*, it were soon said, *consult the Schools of the Jesuites, for there is nothing for the use and practice better than their Precepts:* but we will according to our manner, as it were, gleaning a few ears, give some few advertisements. *We do by all means approve a Collegiat education and institution of Childhood and Youth*; not in private houses, nor only under Schoolmasters. There is in Colledges a greater emulation of Youth towards their equals; besides, there is the sight and countenance of Grave men, which seems to command modesty; and fashions and moulds tender minds, even from their first growth to the same Pattern: in some there are many other utilities of *Collegiat Education*.

§ *For the order* and manner of Discipline, this I would principally advise: *that Youth beware of compends and abridgements, and too forward maturation of knowledge, which makes men bold and confident; and rather wants great proceeding, than causeth it.*

§ *Further there is an indulgence to be given to the liberty and vent of nature in particulars*; as if there be any which performs such tasks as the discipline of the place requires; and yet withal steals some hours to bestow on other studies, to which he hath a natural propensity; such a disposition by no means should be checkt or restrain'd.

§ *Again*, it will be worth the pains diligently to observe (which perchance hitherto hath not been noted) that there are two ways, and they, as it were, reflexively opposite, of *training* up of wits, and of *exercising* and *preparing* them. The one *begins with the more easie precepts, and by degrees leads us to the more difficult; the other at first commands and presseth more difficult practices, which when they are conquered, the other sweetly yield and are won with ease.* For it is one *Method* to practise swimming by bladders which lift up, and another *Method* to practise dancing with heavy shooes, which press down the Body; and it is not easie to express, how much a wise intermixtion of these *Methods*, conduceth to the advancing of the faculties, both of the Mind and of the Body.

§ *So the Application and Election of studies according to the propriety of wits, which are instructed, is a matter of singular use and judgement; a true and perfect discovery whereof, Schoolmasters and Tutors owe to the Parents of Children, from whom they may expect such informations, that so they may the better advise upon the particular course of life, unto which they would design and dedicate their sons.* But this also is to be exactly observed that not only exceeding great progression may be made in those studies, to which a man is swayed by a natural proclivity; but also that there may be found, in *studies* properly selected for that purpose, cures and remedies to promote such kind of knowledge, to the impressions whereof, a man may, by some imperfection of nature, be most unapt and insufficient:

ſufficient. *As for example*, if a man may be *Bird-witted*, that is quickly carried away, and hath not the patient faculty of attention; the *Mathematicks* give a remedy thereunto, wherein, if the wit be caught away but for a moment, the demonſtration is new to begin.

§ *So of exerciſes in courſe of teaching, there is matter of great conſequence: but there is a point here that hath been noted of few, that there ſhould be of exerciſes, not only a wiſe inſtitution, but alſo a wiſe intermiſſion.* It hath been excellently obſerved by *Cicero*, *That in exerciſes it often falls out, that men practiſe as well their faults, as their faculties*; ſo that an *ill habit* is ſometimes gotten, and inſinuates it ſelf together with a *Good*; wherefore it is a ſafer way to break exerciſes, and after to fall to them again, than inceſſantly to purſue and preſs them. *But of theſe enough.* Certainly theſe things at firſt view ſeem no ſuch ſolemn and grave matters, yet are they in the iſſue found efficacious and uſeful. *For as in Plants*, the wronging or cheriſhing of them while they are Young, is that, that is moſt important to their thriving or miſcarrying: or as the immenſe greatneſs of the ſtate of Rome, is by ſome deſervedly attributed to the virtue and wiſdom of thoſe *ſix Kings*, which were as Tutors and Foſter-fathers of that ſtate in the Infancy thereof: ſo ſurely the culture and manurance of minds in young and tender years, hath ſuch a forcible operation (though unſeen and not obvious to every mans obſervation) which neither length of time, or aſſiduity and contention of Labour in riper age afterwards, can any way countervail. And it is not amiſs to obſerve how ſmall and mean faculties, if they fall into Great men. or upon Great matters, do ſometimes work Great and important effects. *Hereof we* will ſet down a memorable example, which we the rather note, becauſe the Jeſuites themſelves ſeem not to deſpiſe this kind of Diſcipline; in our opinion upon ſound judgement, and it is a matter, which if it be made profeſſory, is ignominious, if diſciplinary, one of the beſt qualities: *We mean Action upon the ſtage; as that which ſtrengthens memory, moderates the tone and emphaſis of voice, and Pronunciation; compoſes the countenance and geſture to a Decorum, procures a good aſſurance, and likewiſe inureth Youth to the faces of men.* The example ſhall be taken out of *Tacitus*, of one *Vibulenus*, who had been ſometimes an Actor upon the ſtage, but at that time a common ſouldier in the Pannonian Garriſons. This fellow upon the death of *Auguſtus* had rais'd a mutiny, ſo that *Blæſus* the Lievtenant, committed ſome of the mutiners to Priſon; but the ſouldiers by violent impreſſion brake open the Priſons, and ſet them at liberty; and *Vibulenus* about to make a Tribunitial ſpeech before the Souldiers, began in this manner. "You
Annal. 1. "have given light and life to theſe poor innocent wretches; but who "reſtores my brother to me, or life unto my brother, that was ſent hi- "ther in meſſage from the Legions of Germany, to treat of the com- "mon cauſe, and he hath murthered him this laſt night by ſome of his "Fencers, that he hath about him for his executioners upon ſouldiers. "Anſwer *Blæſus*, where haſt thou thrown his body? the moſt mortal "enemies, do not deny burial: when I have performed my laſt duties "unto the corps with kiſſes, with tears, command me to be ſlain be- "ſides him; ſo that theſe my fellows for our good meaning, and our "true hearts to the Legions, may have leave to bury us. With which ſpeech he put the Army into ſuch an infinite fury and amaze, that if it had

had not incontinently appeared, that there was no ſuch matter, and that he never had any brother; the Soldiers would hardly have ſpared the Lieutenant's life; for he played it merely, as if it had been ſome interlude upon the Stage.

§ Now we are come to a period of our Treatiſe concerning *Rational knowledges*; wherein if we have ſometimes departed from the *receiv'd partitions*, yet let no man think that we diſallow all thoſe *partitions* which we have not uſed: for there is a double neceſſity impoſed upon us, of altering the *Diviſions*; *The one becauſe theſe two, namely to ſort together thoſe things which are next in nature, and to caſt into one pile thoſe things which are next in uſe; are in their end and purpoſe altogether differing.* For example: A Secretary of a Prince, or of Eſtate, ſo digeſts his Papers, without doubt, in his Study, as he may ſort together things of like nature, as Treaties apart, Inſtructions apart, Forreign Letters, Domeſtick letters, all apart by themſelves; on the contrary in ſome particular Cabinet, he ſorts together thoſe that he were like to uſe together, though of ſeveral nature: ſo in this general *Cabinet of Knowledge*, we were to ſet down *partitions* according to the nature of things themſelves: whereas, if any particular Science were to be handled, we ſhould have reſpected the diviſions fitteſt for uſe and practice. *The other reaſon for changing the Diviſion is, becauſe the adjection of Deficients to Sciences; and the reduction of them into an intire Body did by conſequence alter the partition of the Sciences themſelves.* For ſay, the Arts which are extant (for demonſtration ſake) be in number 15, and the Deficients ſuperadded make up the number 20: I ſay that the parts of 15 are not the parts of 20, for the parts of 15 are 3 and 5, but the parts of 20, are 2, 4, 5 and 10, ſo is it plain theſe could not otherwiſe be. And ſo much of *Logical Sciences.*

THE

Seventh Book

OF

FRANCIS L. VERULAM

VICOUNT St *ALBAN*,

OF THE

Dignity and Advancement

OF

LEARNING.

To the KING.

CHAP. I.

I. The Partition *of Moral Knowledge, into the Doctrine of Exemplar, or Platform; and into the Georgicks or Culture of the Mind.* §. The Diviſion of the *Platform of Good, into Good Simple, and Good compar'd.* II. *The Diviſion of Good Simple, into Individual Good, and Good of Communion.*

WE are now come (Excellent *King*) *unto Moral Knowledge, which reſpecteth and handleth the will of Man: Right Reaſon governs the Will, Good Apparent ſeduceth it; the Incentives of the Will are the Affections, the Organs and voluntary Motions are her Miniſters*; of this faculty *Salomon* ſaith, *Above all keepings, keep thy Heart; for out of it iſſue the affections of life.* In handling of this Science, thoſe which have written thereof, ſeem to me to have done, as if a man that profeſſed the Art of writing, ſhould only exhibit fair Copies of *Alphabets* and Letters joyned, without giving any precepts for the carriage of the hand, and framing of the Characters: ſo have they propounded unto us good and fair examples and draughts, or accurate protraitures of Prov. 4.

Good, Vertue, Duties, Felicity, as the true objects and ſcopes of *man's Will* and *Deſires:* but how to take a juſt level at *theſe marks* (excellent indeed, and by them well ſet down) that is, by what precepts and directions, the *Mind* may be ſubdued and framed, to purſue and attain *them*; either they paſs it over altogether, or perform it ſlightly and unprofitably. It is not the diſputing that *Moral Vertues are in the mind of Man by habit, and not by Nature*; or formally diſtinguiſhing between *generous ſpirits, and the obſcure vulgar*; *that thoſe are won by the weight of Reaſons*; *theſe by reward and puniſhment*; or the witty Precept, *that to rectifie the mind of man, it muſt like a ſtaff be bowed the contrary way to its inclination*; and the like glances ſcattered here and there. Theſe and the like are far ſhort of being a juſt excuſe of the deficience of that thing, which now we ſeek: *The reaſon of this neglect, I ſuppoſe to be, that hidden Rock, whereupon ſo many Barks of Knowledges have run and been caſt away*; *which is, that writers deſpiſe to be converſant in ordinary and common matters*; *which are neither ſubtile enough for Diſputation, nor flouriſhing enough for Ornament.* Verily it cannot eaſily be expreſſed, what calamity this thing we now ſpeak of hath brought upon Sciences; *that out of an inbred pride and vain-glory, men have made choice of ſuch ſubjects of Diſcourſe, and of ſuch a manner and method of handling, as may commend rather their own wit, than conſult the Readers profit.* *Seneca* ſaith excellently, *Nocet illis eloquentia, quibus non rerum facit cupiditatem, ſed ſui*; For Writings ſhould be ſuch as ſhould make men in love with the *Leſſons*, and not with the *Teachers.* Therefore they take a right courſe, which can openly avouch the fame of their Counſels, which *Demoſthenes* once did, and can conclude with this clauſe, *which if you put in execution, you ſhall not only commend the Orator for the inſtant, but your ſelves likewiſe, not long after, in a more proſperous ſtate of your affairs. As for my ſelf* (Excellent King) *to ſpeak the truth of my ſelf, I have often wittingly and willingly neglected the glory of mine own Name, and Learning (if any ſuch thing be) both in the works I now publiſh, and in thoſe I contrive for hereafter; whilſt I ſtudy to advance the good and profit of mankind. And I, that have deſerv'd, perchance, to be an Architect in Philoſophy and Sciences, am made a Work-man and a Labourer, and at length any thing elſe whatſoever; ſeeing I ſuſtain and work out my ſelf many things that muſt needs be done; and others out of a natural diſdain ſhift of and refuſe to do.* But, (to return to the matter) which we were about to ſay, *Philoſophers in Moral Science, have choſen to themſelves a reſplendent and luſtrous maſs of matter; wherein they may moſt glorifie themſelves, for ſharpneſs of Wit, or ſtrength of Eloquence: but ſuch precepts as ſpecially conduce to practice, becauſe they cannot be ſo ſet out, and inveſted with the ornaments of ſpeech; they have in a manner paſs'd over in ſilence.* Neither needed men of ſo excellent parts, to have deſpaired of a Fortune like that, which the Poet *Virgil*, had the confidence to promiſe to himſelf, and indeed obtain'd; who got as much glory of Eloquence, Wit and Learning, in the expreſſing of the obſervations of husbandry; as in deſcribing the Heroical Acts of *Æneas.*

Ariſtot. Et. lib. 2.

In Epiſt.

Demoſt.

Nec ſum animi dubius, verbis ea vincere, magnum Geor. 3.
Quam ſit, & angustis his addere rebus honorem.

And ſurely if the purpoſe be good in earneſt, not to write at leiſure, that which men may read at leiſure; but really to inſtruct and be a ſubſidiary to Active life; theſe *Georgicks of Man's Mind*, ought to be had in as great eſteem with men, as thoſe heroical portraitures of Virtue, Goodneſs, and Felicity, wherein ſo much labour and coſt hath been beſtowed.

I. We will therefore divide *Moral Philoſophy*, into two main and Principal *Knowledges*; *the one concerning the Exemplar or Image of Good*; *the other concerning, the Regiment and Culture of the Mind*, which we are wont to call the *Georgicks of the Mind:* that deſcribes the *Nature of Good*; this preſcribes rules, how to ſubdue and accommodate the mind of Man thereunto.

§ *The Doctrine touching the Platform*, which reſpects and deſcribes the *Nature of Good*, conſiders *Good* either *Simple* or *Compared*, I ſay either the *kinds* of Good, or the *Degrees of Good*. In the later of *theſe*, thoſe infinite Diſputations and Speculations *touching the ſupreme degree of Good*, which they term *Felicity*, *Beatitude*, the *higheſt good*, (the Doctrines of which were the Heathens Divinity) are by the Chriſtian Faith, taken away and diſcharged. For as *Ariſtotle* ſaith, *That Young men may be happy, but not otherwiſe but by hope*; ſo muſt we all, being ſo taught by Chriſtian Faith, acknowledge our ſelves to be but children and in our Minority; and think of no other felicity, than that which is in hope of the future world. Freed therefore by happy fate from this doctrine, which was the *Heathens Heaven* (wherein without doubt, they attributed a higher elevation of man's Nature, than it was capable of; for we ſee in what a height of ſtile *Seneca* writes, *verè Magnum habere fragilitatem hominis, ſecuritatem Dei*) we may certainly with leſs loſs of Sobriety and Truth, receive for moſt part the reſt of their enquiries concerning the doctrine of the *Platform*. As concerning the *Nature of Good Poſitive and Simple*, ſurely they have ſet it out in beautiful colours and drawn it to the life, upon excellent Tables; repreſenting with exact diligence to the eye, *the Forms, Poſtures, Kinds, Affinities, Parts, Subjects, Provinces, Actions, Adminiſtrations of Virtues and Duties*. Nor do they ſo leave the purſuit; for they have commended and inſinuated all theſe into the ſpirit of man, with great quickneſs and vivacity of Arguments, and ſweetneſs, and beauty of Perſwaſions; yea and fortified and intrenched the ſame (as much as diſcourſe can do) againſt corrupt and popular opinions and invaſions. *As touching the nature of comparative good*, they have alſo well handled that, in ſetting down that *triplicite Order of Good*, in *comparing contemplative life with Active*; *in diſtinguiſhing between virtue with reluctation, and virtue ſetled by ſecurity and confirmed: in the conflict and encounter between honeſty and profit*; *in the ballancing of virtue with virtue, to ſee which preponderates other*; and the like. So as this part touching the *Platform*; I find excellently laboured, and that the ancients herein have ſhewed themſelves admirable men: yet ſo as the pious and painful di-

Rhet. lib. 2.

In Epiſt.

ligence

ligence of Divines, being practis'd in *Duties, Moral virtues, Cases of Conscience, and circumscriptions of sin*, have far outgone the Philosophers. *Notwithstanding* (to return to the Philosophers) if before they had addrest themselves to the popular and receiv'd notions of *Virtue, Vice, Pain, Pleasure*, and the rest; they had staid a little longer and had searched the *Roots of Good and Evil, and the strings of those Roots*; they had given in my judgement a great light unto all which might fall into enquiry afterwards: especially if they had consulted as well with the *Nature of things, as with the Axioms of Morality*, they had made their Doctrines less prolix, and more profound: which being by them either altogether omitted, or very confusedly handled, we will briefly re-examine and endeavour to open and clear the springs of *Moral habits*, before we come unto the doctrine of the *Culture or Manurance of the Mind*, which we set down as *Deficient*.

II. There is inbred and imprinted in every thing an appetite to a *duple Nature of Good*; *the One as every thing is a Total or Substantive in it self*; *the other as it is a part or member of some greater Total*: and this *latter* is more excellent and potent than the *other*: because it tendeth to the conservation of a more *ample form*. *The first may be called Individual or self-Good*; *the latter the Good of Communion*: *Iron* in a particular Sympathy moves to the *Loadstone*, but yet if it exceed a certain Quantity it forsakes those affections, and like a good Citizen and a true Patriot moves to the Earth, which is the Region and Country of its connaturals. To proceed a little further; *Dense* and *Massie Bodies* move to the Earth, to the great Congregation of *close-compacted Bodies*; yet rather than to suffer a divulsion in the continuance of nature, and that there should be, as they call it, a *Vacuum*, these Bodies will move upwards, forsaking their duty to the *Earth* that they may perform the general duty they owe unto the *World*: so it is ever seen *that the Conservation of the more general and publick form, commands and governs the lesser and more particular Appetites and Inclinations*. But this Prerogative of the *Good of Communion*, is especially engraven upon Man, if he degenerate not, according to that memorable speech of *Pompeius Magnus*, who being in Commission for purveyance for a Famine at Rome, and being disswaded with great vehemence and instance by his friends that he would not hazard himself to Sea in an extremity of weather, he answered only this, *Necesse est ut eam, non ut vivam*. So as the love of life which in every Individual Creature is so predominant an affection, could not out-ballance his love and loyalty to the state. But why do we dwell upon this Point? There was never extant in any age of the world, either Philosophy, or Sect, or Religion, or Law, or Discipline, which hath so highly exalted the *Good of Communion* and depress'd *Good private and particular*, as the *Holy Christian Faith*, whereby it clearly appears, that it was one and the same *God* that gave the Christian Law to Men, who gave those Laws of Nature to Creatures of inferior order. Wherefore we read that many of the elect Saints of God have rather wished themselves anathematiz'd and raz'd out of the *Book of Life*, than that their brethren should not attain salvation; provoked through an extasie of Charity and an infinite feeling of the *Good of Communion*. This being set down and strongly planted, doth judge

St Paul. Rom. IX.

and

and determine many of the profoundeſt Controverſies in *Moral Philoſophy*. For firſt, it decideth the Queſtion *touching the preferment of the Contemplative or Active life*; and that againſt the opinion of *Ariſtotle*: for all the reaſons which he brings for the *Contemplative*, reſpect a *private Good*, and the pleaſure and dignity of an Individual only; in which reſpects (no queſtion) a *Contemplative life* hath the preheminence. For the *Contemplative life* is not much unlike to that compariſon which *Pythagoras* made for the gracing and magnifying of *Philoſophy* and *Contemplation*; who being askt by *Hiero* what he was, anſwered; "*That* "*if Hiero were ever at the Olympian Games, he knew the manner that ſome* "*came to try their fortunes for the prizes; and ſome came as Merchants to* "*utter their commodities; and ſome came to make good cheer, to be merry,* "*and to meet with their friends; and ſome came to look on, and that he* "*was one of them that came to look on.* But men muſt know that in this Theatre of Man's life, it is reſerved only for God and Angels, to be Lookers on. Neither ſurely could it have been that any doubt, touching this point, ſhould ever have been rais'd in the Church (notwithſtanding that ſaying was frequent in many mens mouths, *Pretioſa in oculis Domini mors ſanctorum ejus*: by which place they uſe to exalt their *Civil Death* and the Laws of a Monaſtick and Regular courſe of life;) but upon this defence, *that the Monaſtical life is not ſimply Contemplative*; but is altogether converſant in *Eccleſiaſtick Duties*, ſuch as are inceſſant Prayer; Sacrifices of Vows performed to God; the writing alſo, in ſuch great leiſure, Theological Books for the propagation of the knowledge of the *Divine Law*, as *Moſes* did when he abode ſo many days in the *retir'd ſecrecy of the Mount*. And ſo we ſee *Enoch* the ſeventh from *Adam*, who ſeems to be the firſt founder of a *Contemplative life*, (for he is ſaid to *have walked with God*) yet endowed the Church with a Book of Prophecie, which is alſo cited by St. *Jude*. But as for a *mere Contemplative life*, and terminated in it ſelf, which caſteth no Beams of heat or light upon humane ſociety; aſſuredly Divinity knows it not. It decides alſo the Queſtion controverted with ſuch heat between the Schools of *Zeno* and *Socrates*, on the one ſide, who placed Felicity in Virtue ſimple or attended, which hath a great ſhare in the *Duties of life*: and on the other ſide other Sects and Profeſſions, as the Schools of the *Cyrenaicks* and *Epicureans*, who placed it in pleaſure; and made Virtue, (as it is uſed in ſome Comedies, where the Miſtreſs and the Maid change habits) to be but as a hand-maid, without which Pleaſure cannot be well waited and attended upon; as alſo that other, as it were, reformed School of *Epicurus*, which aſſerted *Felicity* to be nothing elſe than a Tranquillity and Serenity of Mind free and void of all Perturbations; as if they would have depoſed *Jupiter* from his Throne and reſtored *Saturn* with the Golden Age, when there was no Summer nor Winter, nor Spring nor Autumn, but all after one Air and Seaſon. Laſtly, the exploded School of *Pyrrho* and *Herillus*, which placed Felicity in the utter exſtinction and extirpation of all the ſcruples and diſputes of the mind, making no fixt and conſtant nature of Good, and Evil, but eſteeming Actions Good or Evil, as they proceed from the Mind in a clear and reſolute motion; or contrary-wiſe with averſation and reluctance. Which opinion notwithſtanding hath revived in the

Iamb. in vita.

Pſal. CXVI.

Exod. XXIII.

Gen. V.

In Epiſt.

Laert. vita.

Hereſy

Hereſy of the *Anabaptiſts, who meaſur'd all things according to the Motions and Inſtincts of the ſpirit, and the conſtancy, or wavering of Belief.* But it is manifeſt that all this we have recited, tends to private repoſe and complacency of Mind, and no way to the Point of *Society*, and the *Good of Communion.* Again, it cenſures alſo the Philoſophy of *Epictetus*, who layes down this preſuppoſition; *That Felicity muſt be placed in thoſe things which are in our power, leſt we be liable to fortune and diſturbance:* as if it were not a thing much more happy, to be diſturbed and fruſtrated of a good ſucceſs in worthy and generous intentions and ends, which concern the *Publick Good*, than to obtain all that we can wiſh to our ſelves, in thoſe things which refer to our *Private Fortune.* As *Conſalvo* ſhewing his Souldiers *Naples*, bravely proteſted, *That he had rather run himſelf upon certain ruine with one foot forward, than to have his life ſecur'd for long, by one foot of retreat.* Whereunto the wiſdom of that heavenly leader and commander hath ſign'd, who affirm'd, *That a good conſcience is a continual Feaſt*; by which words is plainly ſignified, *that a Mind Conſcious of good Intentions, however ſucceeding, affords more ſolid and ſincere joy, and to nature more agreeable, than all that proviſion wherewith man may be furniſht either for the fruition of his deſires, or the repoſe of his Mind.* It cenſureth likewiſe that abuſe of Philoſophy, which grew general about the time of *Epictetus*, which was, that *Philoſophy* was converted into a profeſſory kind of life, and, as it were, into an Occupation or Art; as if the purpoſe of Philoſophy, was not to repreſs and extinguiſh perturbations, but to fly and avoid the cauſes and occaſions of them; and therefore to ſhape a particular kind and courſe of life to that end; introducing indeed ſuch a kind of health of mind, as was that of *Herodicus* in body, whereof *Ariſtotle* makes mention, which was, *that he did nothing all his life long but intend his health*, and therefore abſtain'd from infinite number of things, being amerc'd by the fruition of his body: whereas if men refer themſelves to duties of ſociety, that health of Body is principally to be deſired, which may beſt endure and overcome all alterations and extremities: ſo likewiſe that mind is properly ſound and ſtrong, which can break through the moſt and greateſt temptations and perturbations. So as *Diogenes* ſeems to have ſpoken well, who commends thoſe powers of the Mind, *which were able not warily to abſtain but valiantly to ſuſtain*, and which could refrain the violent encounter of the Mind, even in the ſteepeſt Precipices, and which could give unto the Mind (which is commended in well-broken horſes) the ſhorteſt ſtop and turn. Laſtly, it cenſures the tenderneſs and the want of Morigerous application, noted in ſome of the moſt ancient and reverend Philoſophers, that did retire too eaſily from Civil buſineſs, that they might diſcharge themſelves of all indignities and perturbations, and ſo might live, in their opinion, more unſtained, and, as it were, ſanctified perſons; whereas the reſolution of a man truly moral, ought to be ſuch, as the ſame *Conſalvo* required in a ſouldier, which is that his Honour ſhould be woven *è Tela Craſſiore*, and not ſo fine as that every thing ſhould catch in it, and tear it.

Epict. Enchir. Arrian. Lib. 1.

Prov. xv.

Ανέχε Απέχε Summa Stoic. Philoſ.

CHAP.

CHAP. II.

I. The Partition of *particular or private Good, into Good Active, and Good Passive.* II. The Division *of Good Passive, into Conservative Good, and Perfective Good.* III. The Division *of the Good of Communion, into General and Respective Duties.*

I. WHerefore let us now resume and prosecute, first *private* or *particular Good*, we will divide it into *Good Active* and *Good Passive*, for this difference of *Good* (not unlike surely to those Appellations, which, amongst the Romans, were familiar in their Houshold Terms of *Promus* and *Condus*) is found impress'd in the whole course of Nature: but chiefly discloseth it self in the two several Appetites of Creatures; the one of *conserving and fortifying* themselves; the other of *multiplying and dilating* themselves; and this latter which is *Active*, and as it were, the *Promus*, seems to be the more powerful, and the more worthy; but the former which is *Passive*, and, as it were, the *Condus*, may be taken as inferiour and less worthy. For in the universal frame of Nature, the Heavenly Nature is chiefly the *Agent*; the Terrestial Nature the *Patient*: so in the pleasures of living Creatures, the pleasure of Generation is greater than that of Nutrition: and in the divine Oracles it is pronounced, *Beatius esse dare quam accipere.* Nay farther, in the common course of life, there is no mans spirit so soft and effeminate, but esteems the effecting, and bringing to some issue that which he hath fixt in his desire, more than any sensuality or pleasure. And certainly this preheminence of *Active Good*, is infinitely exalted from the consideration of our humane condition, that it is mortal, and also exposed to the stroak of Fortune: for if there could be obtained a license of perpetuity and certainty in humane Pleasures, their price would be advanced, for their security and continuance. And in as much as we see, that the summ of all comes to this, *Magni æstimamus mori tardus*; *Et ne glorieris de crastino, nescis partum Diei*: it is no wonder, if with all contention of spirit, we pursue those things, which are secur'd and exempt from the injuries and affronts of time: and these things can be nothing else but only our *deeds*, as it is said, *opera eorum sequuntur eos.* Act. 20. Apoc. XIV.

§ There is likewise another preheminence of *Good Active* of import, implanted in, and supported by that affection, which cleaves close to man's nature, as an individuate companion; which is the *love of Novelty and Variety.* And this *Affection* in the pleasures of senses (which are the very principal part of *Passive Good*) is exceeding narrow, and hath no great latitude: *Do but think* (saith *Seneca*) *how often you have acted over the same things, Meat, Sleep, Mirth; we run round in this circle, to be willing to dye, not only a valiant, or a wretched, or a wise man may, but even a fastidious and nice nature may.* But in the Enterprises, Purposes and Pursuits of our life, there is much variety, whereof we are sensible in our inceptions, progres- Sen alicubi.

sions, rests, recoils, to redintegrate our forces, approaches, attainings, and the like; so as it was very well said, *vita sine Proposito languida & vaga est:* which indifferently befals both to the wise and unwise, as saith *Solomon*, *A light-brain'd man seeks to satisfie his fancy, and intermixeth himself in all things.* Nay, we see likewise, that many great Princes, who may have at command whatsoever can delight the Senses, notwithstanding many times, have procured to themselves poor desires, and set their hearts upon toys; (as Nero, *in playing upon the Harp*; Commodus *in playing at Fence*; Antoninus *in driving Chariots*, and others taken up with other delights) which to them were more acceptable than all the affluence of sensual pleasures: *so much greater refreshing and contentment it is, to go forward in Action, than to stand at a stay in fruition.* This, in the mean time, is to be somewhat more diligently noted; that this *Active individual Good*, altogether differs from the *good of Society*, though oftentimes they are coincident; for although that *particular active Good* doth many times breed, and bring forth *Acts of Beneficence*, which is a *Vertue of Communion*; yet here's the difference, that those Acts are by most men performed, not with intention to benefit and make happy others, but merely in a private respect to themselves, and their own power and amplification. This best appears when *Good Active* lites upon a subject which is contrary to the *Good of Communion:* for that Gigantive State of mind which possesseth the troublers of the world (such as was *L. Sylla*, and infinite others, though in a far smaller Model) who seem to endeavour this, to have all men happy or unhappy, as they were their Friends or Enemies, and that the world might bear their stamp, and be formed to their humours (which is the true *Theomachie*) this, I say, aspires to *active particular Good* at least in appearance, although it doth most of all recede from the *Good of Society.*

Sen. in Ep.

Prov.

II. But we will divide *Passive Good* into *Good Conservative* and *Good Perfective:* For there is implanted in every thing a triple Appetite in respect of *private* or *particular Good*; *the first of preserving or continuing it self*; *the second of advancing and perfecting it self*; *the third of multiplying and extending it self:* but this last Appetite is referr'd to *Active Good*, whereof we speak even now. There remain therefore the two other kinds of *Good*, of which the *Perfective* excels; for it is less to conserve a thing in its natural state, but greater to advance the same thing to a higher nature; for there are found through all Essences some nobler natures to the dignity and excellency whereof inferiour natures do aspire, as to their Originals and Springs. So concerning Men, the Poet doth not impertinently describe,

Virg. Æn. 6. *Igneus est Ollis vigor & Cœlestis Origo;*

Man's assumption or approach to a Divine or Angelical Nature is the perfection of his Form; a depraved and prepostrous imitation of which *Perfective Good* is the destruction of humane life, and a violent tempest which bears down and ruines all, that is, while men instead

inſtead of a formal and eſſential advancement are carried in a blinde ambition to an advancement only Local. *For as thoſe* which are ſick and find no Remedy, do tumble up and down, and change place, as if by a remove Local, they could obtain a remove Internal, and ſhift of their diſeaſe: ſo it is in Ambition that men being poſſeſs'd and led away with a falſe reſemblance of exalting their nature, purchaſe nothing elſe but an eminence and celſitude of *Place.*

§. But *Good Conſervative* is no other than *the reception and fruition of things agreeable to our Nature*; and this *Good* though it be moſt ſimple and native; yet ſeems it to be of all other kinds of *Good* the ſofteſt and loweſt. And this *Good* alſo admits a difference, which hath neither been well judg'd of, nor well inquired; for the *Good of Fruition*, or (as it is commonly call'd) the dignity and commendation *of delightful Good*, is placed either in the *Sincerity of the Fruition*, or in the *quickneſs and vigor* of it; whereof the one is ſuperinduced by *Equality*; the other by *Variety* and *Viciſſitude*: the one having a leſs mixture of *Evil*; the other a more ſtrong and lively impreſſion of *Good.* But of theſe, *whether is the greater Good*, is a queſtion controverted: But *whether a man's nature may be capable of both at once, is a queſtion not inquired.*

§ As touching that whereof a Queſtion is rais'd: a Controverſie began to be debated between *Socrates* and a *Sophiſt*; *Socrates* affirm'd, *That Felicity was placed in a conſtant Peace and Tranquility of mind*; but the *Sophiſt* in this, *That a man deſire much and enjoy much.* And ſo they fell from Arguments to ill words; the *Sophiſt* ſaying *that* Socrates's *Felicity was the Felicity of a block or ſtone: Socrates* on the other ſide, *That the* Sophiſt's *Felicity was the Felicity of one that had the Itch, who did nothing but itch and ſcratch.* And both theſe opinions do not want their ſupports; for to *Socrates's* opinion aſſents even the School of *Epicurus*, which deems not but that Vertue beareth a great part in Felicity; and if ſo, *Certain it is, that Vertue hath more uſe in clearing Perturbations, than in compaſſing deſires.* The *Sophiſt's* opinion is much favour'd by the aſſertion we laſt ſpake of; namely that *Good Perfective is greater than Good Preſervative, becauſe the obtaining of things deſired, ſeems by degrees to perfect nature; which though it do not do it indeed, yet the very motion it ſelf in circle hath a ſhew of Progreſſive Motion.* Plato in Gorg.

But the ſecond Queſtion, (*whether humane nature may not at once retaine, both the tranquility of mind, and the active vigor of fruition*) decided, the true way makes the former idle and ſuperfluous. For do we not often ſee that ſome men are ſo fram'd and compoſed by Nature, as they are extremely affected with pleaſures while they are preſent; and yet are not greatly troubled at the leaving or loſs of them. So as the Philoſophical conſequence, *Non uti, ut non appetas, non appetere, ut non metuas*, ſeems to be the reſolution of a poor and diffident ſpirit. Surely moſt of the Doctrines of Philoſophers ſeem to be ſomewhat more fearful and cautionary, than the nature of things requireth; as when they encreaſe the fear of death by curing it: for when they would have a man's whole life to be but a diſcipline or preparation to dye, how can it be, that that enemy ſhould not ſeem

wonderful terrible, againſt whom there is no end of preparing? better ſaith the Poet though a Heathen,

Juven. Satyr. 10. *Qui ſpacium vitæ extremum, inter munera ponat Naturæ.*——

So have the Philoſophers ſought to make the Mind in all things uniform and Harmonical; by not breaking them to contrary Motions and Extremes. The reaſon whereof I ſuppoſe to have been, becauſe they dedicated themſelves to a private courſe of life; exempt and free from active imployments and obſervances to others. But let men rather imitate the wiſdom of Jewellers, who, if perchance, there be in the Gemm a Cloud or an Ice, which may ſo be grownd forth, as it abate not the ſtone too much, they help it, otherwiſe they will not meddle with it: ſo ought men ſo to procure *Serenity* of mind as they deſtroy not *Magnanimity*. Thus much of *Particular Good*.

III. Now therefore after we have ſpoken of *Self-good* (which alſo we uſe to call *Good Particular*, *Private*, *Individual*, let us reſume the *Good of Communion*, which reſpecteth *Society*, this is commonly termed by the name of *Duty*, becauſe the term of *Duty*, is more proper to a mind well fram'd and diſpos'd towards others; the term of *Virtue*, to a mind well form'd and compos'd in it ſelf. But this part at firſt ſight may ſeem to pertain to *Science Civil*, or *Politick*, but not if it be well obſerved; for it concerns the Regiment and Government of every man over himſelf, and not over others. *And as in Architecture*, it is one thing, to to frame the Poſts, Beams, and other parts of an Edifice, and to prepare them for the uſe of building; and another thing, to fit and joyn the ſame parts together: and as in Mechanicals, the direction how to frame, and make an inſtrument or engine, is not the ſame with the manner of erecting, moving, and ſetting it on work: So the doctrine of the conjugation of men, in a *City or Society*, differs from that which makes them conformed, and well affected to the weal of ſuch a *Society*.

§ This Part of Duties is likewiſe diſtributed into two portions, whereof the one reſpects the *common duty of every man*, the other *the ſpecial and reſpective Duties* of every man in his profeſſion, vocation ſtate, perſon, and place. The firſt of theſe, hath been well laboured, and diligently explicated by the Ancients and others, as hath been ſaid: the other we find to have been ſparſedly handled, although not digeſted into an entire body of a *Science*; which manner of diſperſed kind of writing, we do not diſlike; howbeit in our judgement, to have written of this Argument by parts, were far better. For who is endewed with ſo much perſpicacity and confidence, as that he can take upon him to diſcourſe, and make a judgement skilfully, and to the life, of the *peculiar and reſpective duties* of every particular order, condition and Profeſſion? *And the treatiſes which are not ſeaſon'd with experience, but are drawn only from a general and Scholaſtical notion of things, are touching ſuch matters, for moſt part, idle and fruitleſs diſcourſes.* For although ſometimes a looker on may

may see more than a Gamester; and there be a common proverb, more arrogant than sound, proceeding from the censure of the vulgar, touching the actions of Princes, *That the vale best discovereth the Hills*; yet it could be especially wished, that none would intermeddle or engage themselves in subjects of this nature, but only such as are well experienc'd and and practis'd in the particular customs of men. *For the labours and vigilancies of speculative men, in Active Matters, do seem to men of experience, little better, than the discourses of Phormio of the wars, seemed to Hannibal, which esteemed them but dreams and dotage.* Only there is one vice which accompanies them, which write books of matters pertaining to their own profession, and Art, which is, that they magnifie and extol them in excess. Cic. Lib. 2. de Oratore.

§ *In which kind of Books, it were a crime Piacular, not to mention,* Honoris causa, *Your Majestie's excellent work* touching the duty of a King: *for this writing hath accumulated and congested within it many treasures as well open as secret of* Divinity, Morality, *and* Policy, with great aspersion of all other Arts; *and it is in my opinion one of the most sound and healthful writings that I have read. It doth not float with the heat of Invention; nor freez and sleep with the coldness of negligence: it is not now and then taken with a wheeling dizziness, so to confound and lose it self in its order; nor is it distracted and discontinued by digressions, as those discourses are; which by a winding expatiation, fetch in and enclose matter that speaks nothing to the purpose; nor is it corrupted, with the cheating Arts of Rhetorical perfumes and paintings, who chuse rather to please the Reader, than to satisfie the nature of the Argument. But chiefly that work hath life and spirit, as Body and Bulk, as excellently agreeing with truth, and most apt for use and action: and likewise clearly exempt from that vice noted even now, (which if it were tolerable in any, certainly, it were so in Kings, and in a writing concerning Regal Majesty) namely, that it doth not excessively and invidiously exalt the Crown and Dignity of Kings. For* Your Majesty *hath not described a King of* Persia *or* Assyria, *radiant, and shining in extreme Pomp and Glory; but really, a* Moses *or a* David, *Pastors of the People. Neither can I ever lose out of my remembrance, a Speech, which* Your Majesty, *in the sacred Spirit, wherewith you are endowed to govern Your people, delivered in a great cause of Indicature, which was,* That Kings rul'd by the Laws of their Kingdoms, as God did by the Laws of Nature; and ought as rarely to put in use that their prerogative, which transcends Laws, as we see God put in use his power of working Miracles. *And yet notwithstanding in that other book, written by* Your Majesty, of a free Monarchy, *You give all men to understand, that* Your Majesty, *knows and comprehends the Plenitude of the Power of Kings, and the Ultimities (as the Schools speak of Regal Rights; as well as the circle and bounds of their Office, and Royal Duty.* Wherefore I have presumed, to alledge *that book* written by *Your Majesty*, as a prime and most eminent example of Tractates, concerning *special and respective Duties.* Of which Book, what I have now said, I should in truth have said as much, if it had been written by any King a thousand years since. Neither doth that kind of nice Decency move me, whereby commonly it is prescribed K. IAMES, DORON. BASIL. JACOB. R. dictum memorab. DE LIB. MONAR.

not

not to praiſe in preſence, ſo thoſe Praiſes exceed not meaſure; or be attributed unſeaſonably or upon no occaſion preſented. Surely *Cicero*, in that excellent oration *Pro M. Marcello*, ſtudies nothing elſe, but to exhibit a fair Table drawn by ſingular Art, of *Cæſar's virtues*, though that Oration was made to his face; which likewiſe *Plinius ſecundus* did to *Trajan*. Now let us reſume our intended purpoſe.

Cicero.

Plin. Jun.

* SATYRA SERIA, ſive de Interioribus rerum.

§ There belongs farther to this part, touching the *Reſpective Duties of vocations and particular Profeſſions*, and other *knowledge*, as it were, Relative and oppoſite unto the former, concerning the *Frauds*, *Cautels*, *Impoſtures*, and *Vices of every Profeſſion*: For Corruptions and Vices, are oppoſed to Duties and Virtues. Nor are theſe *Depravations* altogether ſilenced in many Writings and Tractates; but for moſt part, theſe are noted only upon the by, and that by way of Digreſſion: but how? rather in a Satyr and Cynically after *Lucian's* manner, than ſeriouſly and gravely, for men have rather ſought by wit to traduce, and to expoſe to ſcorn that which is uſeful and ſound, in Arts and Profeſſions; than to ſever that which is good and wholſome, from that which is corrupt and vitious. But *Solomon* ſaith excellently; *A ſcorner ſeeks wiſdom and finds it not; but knowledge is eaſie unto him that underſtands*: for he that comes to ſeek after knowledge, with a mind to ſcorn, and cenſure; ſhall be ſure to find matter for his humour, but no matter for his inſtruction. And certainly a grave and wiſe Treatiſe of this argument, whereof we now ſpeak, and that with ſincetity and integrity, ſeemeth worthy to be reckoned one of the beſt fortifications of virtue and honeſty, that can be planted. *For as the Fable goes* of the Baſilisk, that if he ſee a man firſt, the man dyes; but if a man ſee him firſt, the Baſilisk dyes; ſo it is with Frauds, Impoſtures, and evil Arts; if a man diſcover them firſt, they loſe their power of doing hurt; but if they prevent, then, and not otherwiſe they endanger. So that we are much beholding to *Machiavil*, and ſuch writers, who diſcover apertly and plainly, what men uſe to do, not what men ought to do: for it is not poſſible to joyn the *wiſdom of the Serpent, with the Innocency of the Dove*, except a man know exactly the nature of evil it ſelf; for without this skill, virtue lyes open and unfenc'd; nay a ſincere and honeſt man can do no good upon thoſe that are wicked, to reclaim them, unleſs he know all the coverts and profundities of Malice. For men of corrupt minds and deprav'd judgements preſuppoſe, that honeſty grows out of the weakneſs of Nature, and ſimplicity of Manners, and only out of a belief given to Preachers and School-Maſters; as likewiſe to Books; Moral Precepts; and popular opinions: ſo that unleſs you can make them plainly to perceive, that their deprav'd and corrupt Principles, and crooked Rules, are as deeply founded, and as plainly diſcovered by thoſe who exhort and admoniſh them, as they are to themſelves, they deſpiſe all the integrity of Moral Practices or Precepts; according to that admirable Oracle of *Solomon*, *Non recipit ſtultus verba prudentiæ, niſi ea dixeris, quæ verſantur in corde ejus.* But this part concerning *Reſpective Cautels and vices*, we place in the number of *Deficients*, and will call it by the name of *Satyra Seria*, or of a Treatiſe *De interioribus Rerum.*

Prov. XIV.

Prov. 18.

So

So to this kind of knowledge, touching *Respective Duties*, do also appertain the *Natural Duties* between Husband and Wife; Parents and Children, Master and Servant: so likewise the laws of Friendship and Gratitude; as also the Civil bonds of Corporations, Companies, Colledges, Neighbour-hood and the like. But it must ever be presupposed, that they are here handled, not as parts of *Civil society* (for that is referr'd to the Politicks) but as to the framing and predisposing of the minds of Particular persons, to the maintaining of those *Bonds of Society.*

§ *But the Knowledge concerning the Good of Communion or of Society*, even as that of *Good Individual*, doth handle *Good* not *simple alone*, but also *comparatively*; whereunto belongs the weighing of Duties between Person and Person; Case and Case; Private and Publick; between time Present and Future: as we may see in the severe and cruel proceeding of L. *Brutus* against his own Sons, which by the most was extoll'd to the heavens; yet another said

Infœlix utcunque ferent ea fata Minores. Liv. Hist. lib. 2. Florus Hist. lib. 1. Plutar. in M. Bruto;

The same we may see in that supper unto which *M. Brutus*, and *C. Cassius* were invited, for there, when there was a question shrewdly cast forth, *Whether it was lawful to kill a Tyrant?* on purpose to feel the minds of the company, touching a conspiracy intended against *Cæsar's* life; the guests were divided in opinion; some said it was directly lawful, *for that servitude was the extreme of Evils*; others were of a contrary mind, *for that Tyranny was not so great a misery as Civil war*; a third sort, as if they had issued out of the School of *Epicurus*, avouched; *That it was an unworthy thing, that wise men should hazard their lives and states for Fools.* But there are many Cases touching *comparative Duties*, amongst which, that of all other is the most frequent; *Whether a man ought to swerve from the rule of Justice, for the safety of his Country, or some such notable Good to ensue afterward?* Touching which case *Jason* of *Thessaly* was wont to say, *Aliqua sunt injustè facienda ut multa justè fieri possint*, but the Reply is ready, *Authorem presentis justitiæ habes, sponsorem futuræ non habes:* Men must pursue things which are just in present, and leave the future to the Divine Providence. And thus touching the *Exemplar*, or of the description of *Good.* Plut. Moral. Præc. gerend. Reip.

Chap.

Chap. III.

I. The Partition *of the Doctrine of the Culture of the Mind, into the Knowledge of the Characters of the Mind.* II. *Of the Affections or Paſſions.* III. *And of the Remedies or Cures.* IV. *An Append of the ſame Doctrine, touching the Congruity between the Good of the Mind, and the Good of the Body.*

NOw that we have ſpoken in a Philoſophical ſence of the *fruit of Life*, it remains that we ſpeak of the *Culture of the Mind*, which is due unto it, without which the former part ſeems nothing elſe, than an Image or Statue, beautiful to contemplate, but deſtitute of Life and Motion; to which opinion, *Ariſtotle* himſelf ſubſcribes in theſe plain words, *Wherefore it is neceſſary to ſpeak of virtue, both what it is, and from what it proceeds: for it would be to little purpoſe, to know virtue, and to be ignorant of the manner and means how to compaſs it. Concerning virtue therefore inquiry muſt be made, not only of what kind it is but by what ways it may be acquired: for we deſire both theſe, the knowledge of the thing it ſelf, and the fruition thereof; but this cannot be effected, unleſs we know of what materials it is compounded, and how to procure the ſame:* In ſuch full words, and with ſuch iteration doth he inculcate this Part; which yet notwithſtanding himſelf purſues not. This likewiſe is the very ſame which *Cicero* attributes to *Cato* the Younger, as a great commendation, which was, that he had applyed himſelf to Philoſophy, *Non diſputandi cauſa, ut magna pars, ſed ita vivendi.* And although, through the negligence of the times wherein we live, few hold any conſultation diligently, to manure and till the Mind, and frame their courſe of life (according to ſome Rule; according to that of *Seneca*, *De partibus vitæ quiſque deliberat, de ſummâ nemo*; ſo as this part may ſeem ſuperfluous,) yet this moves us not, ſo as to leave it untouched, but rather we conclude with that Aphoriſm of *Hippocrates*, *They who are ſick of a dangerous diſeaſe, and feel no pain, are diſtempered in their underſtanding:* Such men need medicine, not only to aſſwage the diſeaſe, but to awake the ſenſe. And if it be ſaid that the *Cure of mens minds*, belongs to ſacred Divinity, it is moſt truly ſaid; but yet why may not *Moral Philoſophy* be accepted into the train of *Theology*, as a wiſe ſervant and a faithful handmaid, ready at all commands to do her ſervice? For as it is in the Pſalm, *That the eyes of the Handmaid, look perpetually towards the Miſtreſs*; and yet no doubt many things are left to the diſcretion and care of the Hand-maid; ſo ought *Moral Philoſophy* to give all due obſervance to Divinity, and to be obſequious to her Precepts; yet ſo, as it may yield of it ſelf, within its own limits, many ſound and profitable directions. *This Part therefore*, when I ſeriouſly conſider, the excellency thereof, I cannot but find exceeding ſtrange, that it is not yet reduced into a *Body of Knowledge*. Wherefore ſeeing we have reported it as *Deficient*, we will after our manner give ſome Adumbrations thereof.

Mag. Moral. lib. 1.

Pro. L. Muræn.

De Brev. vitæ.

Aphor. 1. 2.

Pſal. 123.

I. *Firſt*

I. *First therefore*, in this as in all things which are Practical, we ought to caſt up our account, *what is in our power, and what not: for the one may be dealt with by way of Alteration; the other by way of Application only.* The Husband-man cannot command either the nature of the Earth, or the ſeaſons of the weather; no more can the Phyſician the natural temper or conſtitution of the Patient or the variety of Accidents. Now in the *Culture of the mind of Man*, and the cure of the Diſeaſes thereof; three things fall into conſideration: *The divers Characters of Diſpoſitions; the Affections; and the Remedies.* As in curing the Body three things are propounded, the *Complection or Conſtitution of the Patient; the Diſeaſe; and the Cure*; and of theſe three, the laſt only is in our power, the two former are not. Yet even in thoſe things which are not in our power, no leſs diligent inquiry is to be made thereof, than in thoſe which are ſubject to our power; for a diſtinct and exact knowledge of them is to be laid as a ground-work to the *knowledge of the Remedies*; that they may be more aptly and ſucceſsfully applied; for neither can a garment be well fitted to the Body, unleſs you firſt take the meaſure of the Body.

* GEORGICA ANIMI, ſive de cultura Morum.

§ *Wherefore* the firſt article of this knowledge *of the Culture of the Mind*, ſhall be converſant about the *divers Characters of mens natures or diſpoſitions.* Neither do we here ſpeak of thoſe common Proclivities to virtues and vices; or Perturbations and Paſſions: but of thoſe which are more intrinſick and radical. Surely for this part of knowledge, I do much wonder that it ſhould be, for moſt part, ſo neglected or ſlightly paſt over, by writers Moral and Political; conſidering it caſts ſuch reſplendent Beams upon both thoſe kinds of knowledges. In the Traditions of *Aſtrology*, the natures and diſpoſitions of men, are not without ſome colour of truth, diſtinguiſht from the Prædominancies of Planets; as that ſome are by nature made and proportioned for *contemplation*; others for *matters Civil*; others for *War*; others for *Advancement*; others for *Pleaſure*; others for *Arts*; others for changeable courſe of life. So among the Poets, Heroical, Satyrical, Tragedians, Comedians, you ſhall find every where, the Images of wits, although commonly with exceſs and beyond the bounds of Truth. Nay this ſame Argument of the *divers Characters of Nature*, is one of thoſe Subjects, wherein the common diſcourſes of men, (which very ſeldom, yet ſometimes falls out) are more wiſe than Books. But the beſt proviſion and collection for ſuch a treatiſe, ought to be fetcht from the obſervations of the wiſeſt ſort of Hiſtorians; not only from Elogies and Panegyricks, which commonly follow the death of a Perſon; but much more from the entire body of a Hiſtory, ſo often as ſuch a perſonage doth, as it were, enter upon the ſtage. For this inter-woven Image, ſeems to be a more lively deſcription, than the cenſure of an Elogy; ſuch as is that in *T. Livius, of Africanus*, and of *Cato the Elder*; *in Tacitus of Tiberius, Claudius and Nero*; *in Herodian, of Septimius Severus*; *in Philip de Commines, of Lewis the XI. King* of France; *in Fra. Guicciardine, of Ferdinand King of Spain*; *Maximilian the Emperor*; *Leo and Clemens, Biſhops of Rome.* For thoſe writers fixing their eyes continually on the Images of theſe Perſons, whom they made choice of to decipher,

and pourtrait, ſeldom mention their Acts and Atchievements, but withal, inſert ſomething touching their nature and diſpoſitions; ſo likewiſe many *Relations, touching the Conclaves of Popes*, which we have met withal, repreſent *good Characters, and lively Impreſſions*, of the natural diſpoſitions of *Cardinals*; as the letters of Ambaſſadors, ſet forth the nature and manners of Counſellors to Princes. Wherefore let there be a full, and perfect collection made of this argument, whereof we have ſpoken, which certainly is fertil and copious. *Neither would we*, that thoſe *Characters* in the *Ethicks* (as it is with Hiſtorians, Poets, and in common ſpeech,) ſhould be accepted as perfect politick Images; which compounded and commixt conſtitute any reſemblances whatſoever; how many and of what ſort they may be; and how they are connext and ſubordinate one with another: that there may be made, as it were, an artificial and accurate diſſection of natures and diſpoſitions; and a diſcovery of the ſecret inclinations of Individual tempers; and that from a knowledge thereof, precepts of cure may be more pertinently preſcribed.

§ And not only the *Characters of diſpoſitions*, impreſſed by nature, ſhould be received into this Tractate; but thoſe alſo which are impoſed upon the mind, from Sex, Age, Region, Health, Beauty, and the like: as alſo thoſe from extern fortune, as of Princes, Nobles, obſcure Perſons; Rich, Poor, Private perſons, Proſperous, Miſerable and the like. For we ſee *Plautus* makes it a wonder to ſee an old man Beneficent, *Benignitas quidem hujus, oppidò ut adoleſcentuli eſt:* and St. *Paul*, commanding that the ſeverity of diſcipline, ſhould be uſed to the *Cretans*, (*rebuke them ſharply*) accuſeth the nature of that Nation from a Poet; *Cretenſes ſemper mendaces, malæ beſtiæ, ventres pigri.* *Saluſt* notes this in the nature of Kings, that it is uſual with them to deſire contradictories; *Plerunq; Regiæ voluntates ut vehementes ſunt; ſic mobiles, ſæpeq; ipſæ ſibi adverſæ*, *Tacitus* obſerves that Honours and Advancements, oftner change mens natures to the worſe, than to the better, *Solus Veſpaſianus mutatus in melius. Pindarus* makes an obſervation, that great and *Sodoms* fortune, for moſt part, looſens and diſſinews mens minds; *ſunt, qui magnam felicitatem concoquere non poſſunt:* ſo the Pſalm ſheweth, that it is more eaſie to keep a meaſure and temperament, in a modeſt conſiſtency; than in the increaſe of Fortune, *If Riches increaſe, ſet not your heart upon them.* Theſe obſervations and the like, I deny not, but are touched a little by *Ariſtotle*, as in paſſage, in his Rhetoricks; as likewiſe in the writings of others diſperſedly by the way; but they were never yet incorporated into *Moral Philoſophy*, to which they do principally appertain; no leſs certainly, than the handling of the diverſity of grounds and moulds, doth to *Agriculture*; or the handling of the diverſity of complections and conſtitutions of the body, doth to *Medicine*. The ſame muſt be obſerved here, except we mean to follow the indiſcretion of Empiricks, which miniſter the ſame medicines to all Patients, of what conſtitution ſoever.

Mil. Glo. Ad Tit. c. 1 ex Epimen.

In Jugurth.

Hiſt. lib. 1.

Pindar.

Pſal. 62.

II. *After the knowledge of Characters* follows the *knowledge of Affections* and *Paſſions*, which are as the *Diſeaſes of the Mind*, as hath been ſaid. For as the Ancient Politicks in Popular States were wont

to

to say, *That the people were like the Sea, and the Orators like the winds*; because as the *Sea* would of it self be calm and quiet, if the *winds* did not move and trouble it; so the *People* of their own nature would be peaceable and tractable, if the *seditious Orators* did not set them in working and agitation. So it may be truly affirmed, that *mans mind* in the nature thereof, would be temperate and staid, if the *affections* as winds, did not put it into tumult and perturbation. And here again I find it strange, that *Aristotle*, who writ so many books of *Ethicks*, should never in them handle the *Affections*, as an essential member of *Ethicks*; and yet in the *Rhetoricks*, where they are considered but Collaterally, and in a second degree (that is, so far as they may be rais'd and moved by speech) he finds place for them, (in which place notwithstanding, for such an abridgement, he discourseth acutely and well:) for his disputations about *pleasure and pain*, no way satisfieth this inquiry; no more than he that should write only of *light* and *lightning*, could be said, to have written of the nature of *particular Colours*; for *Pleasure* and *Pain*, are to the particular affections, as *light* is to *Colours*. Better travels the Stoicks have taken in this argument, as far as may be conjectured from such Remains as are extant; but yet such as consisted rather in curiosity of Definitions, than any full and ample descriptions. So likewise I find some elegant Books of some *affections*, as of *Anger*, *of Tenderness*, *of Countenance*, and some few other. But to speak the truth, the best Doctors of *this knowledge* are the Poets, and writers of Histories, where we may find painted and dissected to the life, how affections are to be stirred up and kindled; how still'd and laid asleep; how again contain'd and refrain'd, that they break not forth into Act; likewise how they disclose themselves, though repressed and secreted; what operations they produce; what turns they take; how they are enwrapt one within another; how they fight and encounter one with another; and other the like Particularities. Amongst the which, this last is of special use in Moral and Civil matters, *How, I say, to set Affection against Affection; and by the help of one to master and reclaim another?* After the manner of Hunters and Fowlers, who hunt Beast with Beast; and fly Bird with Bird; which percase of themselves without the assistance of Bruit Creatures, a man could not so easily recover. Nay farther, upon this foundation, is erected, that excellent and universal use in matters Civil of *Præmium* and *Pœna*, which are the *Pillars of Civil States*; seeing those *predominant Affections* of *Fear* and *Hope* do bridle and suppress all other exorbitant *Affections*. Again, as in government of States, it is sometimes necessary to confront and bridle one Faction with another; so it is in the inward *Government of the Mind*.

III. Now come we to those Points which are *within our own command*, and have force and operation upon the mind, and also affect, dispose, and manage the *Will* and *Appetite*; and therefore are of great force to alter the manners. In which part the Philosophers ought to have made a painful and diligent *Inquiry* touching the *Power and Energy of Custom*, *Exercise*, *Habit*, *Education*, *Conversation*, *Friendship*, *Praise*, *Reprehension*, *Exhortation*, *Fame*, *Laws*, *Books*, *Studies*;

dies, and other points of like nature. *Theſe* are *they* which have the ſway and dominion in *Morality*, from theſe Agents the mind ſuffereth and is diſpoſed; of theſe, as of Ingredients, receits are compounded, which conduce to the conſervation and recovery of the Health and good Eſtate of the Mind, as far as may be performed by Humane Remedies. Of which number we will ſelect one or two whereupon we will a little inſiſt as an example to the reſt. We will therefore inſinuate a few points *touching Cuſtom* and *Habit*.

Moral Nicom. lib. 2. That opinion of *Ariſtotle* ſeemeth to me to favour of negligence and a narrow Contemplation, where he aſſerts—*that thoſe Actions which are natural cannot be changed by cuſtom*; uſing for example—*that if a ſtone be thrown a thouſand times up, it will not learn to aſcend of its own accord: Moreover, that by often ſeeing or hearing, we do not learn to hear or ſee the better:* for though this principle be true in ſome things wherein Nature is Peremptory (the reaſons whereof we cannot now ſtand to diſcuſs) yet it is otherwiſe in things wherein Nature, according to a *Latitude*, admits *intention* and *remiſſion*. He might ſee that a ſtrait glove by often drawing on, is made wider; and that a wand by uſe and continuance is bowed contrary to its natural bent in the growth, and ſoon after ſtays in the ſame poſture; that the voice by exerciſing it becomes louder and ſtronger; that heat and cold are better endur'd by cuſtom; and many inſtances of like kind. Which two latter examples have a neerer reſemblance and come neerer to the point, than thoſe he there alledgeth. But however this caſe be determin'd, by how much the more true it is; *that both Virtues and Vices conſiſt in habit*; he ought, by ſo much the more, to have endeavour'd, to have ſo preſcrib'd rules *how ſuch habits might be acquired, or remov'd:* for there may be many Precepts made of the wiſe ordering of the *Exerciſes of the Mind*, no leſs than of the *Exerciſes of the Body*; whereof we will recite a few.

§ *The firſt ſhall be*; *that we beware even at firſt of higher or ſmaller tasks, than the nature of the buſineſs requires, or our leaſure or abilities permit:* For if too great a task be impos'd, in a mean diffident nature, you blunt the edge of chearfulneſs and blaſt their hopes; in a nature full of Confidence, you breed an opinion whereby a man promiſeth to himſelf more than he is able to perform, which draws on ſloth and ſecurity; and in both thoſe temperatures, it will come to paſs that the experiment doth not ſatisfie the expectation; which ever diſcourageth and confounds the mind: but if the Task be too weak and eaſie, in the ſumm of proceeding there is a loſs and prejudice.

§ *A ſecond ſhall be*; *that to the practiſing of any faculty, whereby a habit may be ſuperinduced, two Seaſons are chiefly to be obſerved, the one when the mind is beſt diſpoſed to a buſineſs*; *the other when it is worſt:* that by the one, we may be well forwards on our way; by the latter, we may by a ſtrenuous contention work out the knots and ſtonds of the mind; which makes middle times to paſs with more eaſe and pleaſure.

Moral. Nicom. lib. 2. § *A third Precept ſhall be that which Ariſtotle mentions by the way, which is to bear ever towards the contrary extreme of that whereunto we*

are

are by nature inclin'd, ſo it be without vice. Like as when we row againſt the ſtream; or when we make a crooked wand ſtraight by bending it the contrary way,

§ *The fourth Precept is grounded upon that Axiom which is moſt true. That the mind is brought to any thing with more ſweetneſs and happineſs, if that, whereunto we pretend, be not principal in the intention of the Doer; but be overcome, as it were, doing ſomewhat elſe; becauſe the inſtinct of Nature is ſuch a freedom as hates neceſſity and compulſive commands.* Many other rules there are which might profitably be preſcribed touching the *Direction of Cuſtom:* for *Cuſtom*, if it be wiſely and skilfully induced, *proves* (as it is commonly ſaid) *another Nature*; but being conducted abſurdly and by chance, *it is only the Ape of Nature*; which imitates nothing to the life, but in a fooliſh deformity only.

§ *So if we ſhould* ſpeak of *Books* and *Studies*, and of their power and influence upon Manners; are there not divers Precepts, and fruitful Directions appertaining thereunto? Hath not one of the Fathers in great indignation called *Poeſie, vinum Dæmonum*; being indeed it begets many Temptations, Luſts, and vain Opinions? It is not a wiſe opinion of *Ariſtotle*, and worthy to be regarded: *That young men are no fit auditors of Moral Philoſophy, becauſe the boyling heat of their affections, is not yet ſetled, nor attemper'd with Time and Experience.* And to ſpeak truth, doth it not hereof come that thoſe excellent Books and Diſcourſes of ancient Writers (whereby they have perſwaded unto vertue moſt effectually, repreſenting as well her ſtately Majeſty to the eyes of the world, as expoſing to Scorn, popular Opinions in diſgrace of Vertue, attired, as it were, in their *Paraſite Coats*) are of ſo little effect towards honeſty of Life, and the reformation of corrupt Manners; becauſe they uſe not to be read and revolv'd by men mature in years and judgement; but are left and confin'd only to Boys and Beginners. *But is it not true alſo, that young men are much leſs fit Auditors of Policy than Morality*, till they have been throughly ſeaſon'd with *Religion*, and the knowledge of Manners and Duties; leſt their judgements be corrupted and made apt to think, that there are no *Moral* differences true and ſolid of things; but that all is to be valued according to utility and fortune. As the Poet ſaith,

Moral. Nicom. Lib.

Proſperum & felix ſcelus virtus vocatur. Juvenal. Sat. 13.

And again,

Ille crucem pretium ſceleris tulit, hic Diadema.

But the Poets ſeem to ſpeak this Satyrically, and in indignation; be it ſo, yet many Books of Policy do ſuppoſe the ſame ſeriouſly and poſitively: for ſo it pleaſed *Machiavel* to ſay, *That if* Cæſar *had been overthrown, he would have been more odious than ever was* Cataline;

as if there had been no difference but in *fortune* only, between a very fury compoſed of Luſt and Blood, and the moſt excellent ſpirit (his ambition reſerved) in the world. By this we ſee how neceſſary it is, for men to drink deeply *Pious and Moral Knowledges*, before they taſte *Politick*; for that they who are bred up in the Courts of Princes from tender years, and in affairs of State, commonly never attain an inward and ſincere Probity of Manners; how much farther off from honeſty, if to this fire of corrupt education there be admiſtred the fewel of corrupt Books? *Again*, even in Moral inſtructions themſelves, or at leaſt in ſome of them, is there not a Caution likewiſe to be given, leſt they make men too preciſe, arrogant and incompatible? according to that of *Cicero*, touching *M. Cato*, *Theſe Divine and excellent qualities which we ſee, are his own proper endowments, but ſuch as are ſometimes deficient in him, are all deriv'd from Teachers, and not from Nature.* There are many other Axioms touching thoſe properties and effects which Studies and Books do inſtill into the minds of men: for it is true that he ſaith, *abeunt ſtudia in mores*; which may likewiſe be affirm'd of thoſe other points touching *Company*, *Fame*, the *Laws of our Country*, and the reſt, which a little before we recited. But there is a kind of *Culture of the Mind* which ſeems yet more acurate and elaborate than the reſt, and is built upon this ground, *That the minds of all Mortals are at ſome certain times in a more perfect ſtate; at other times in a more depraved ſtate.* The purpoſe therefore, and direction of this *Culture* is, that thoſe good ſeaſons may be cheriſht, and the evil croſt, and expunged out of the Calender. The *fixation of good Times* is procured by two means, by *vows*, *or at* leaſt *moſt conſtant Reſolution* of the Mind, and by *Obſervances and Exerciſes*, which are not to be regarded ſo much in themſelves, as becauſe they keep the mind in her devoir and continual obedience. The *obliteration of evil Times* may be in like manner perfected two ways; by ſome *kind of Redemption*, *or expiation of that which is paſt*; and by a *new courſe of life*, as it were, *turning over a clean leaf.* But this part ſeems wholly to appertain to Religion, and juſtly conſidering that true and genuine *Moral Philoſophy*, as was ſaid, ſupplies the place of a Hand-maid only to *Divinity*. Wherefore we will conclude this part of the *Culture of the Mind*, with that remedy, which of all other means is the moſt compendious and ſummary: And again, the moſt noble and effectual, to the reducing of the mind to vertue, and the placing of it in a ſtate next to perfection, and this is, *That we make choice of, and propound to our ſelves, right ends of life and actions, and agreeing to vertue; which yet muſt be ſuch as may be in a reaſonable ſort within our compaſs to attain.* For if theſe two things be ſuppos'd, *that the ends of actions be honeſt and good*; and *that the reſolution of the mind, for the purſuing and obtaining them, be fixt, conſtant, and true unto ſuch ends*; it will follow that the mind ſhall forthwith transform and mould it ſelf into all vertues at once. And this indeed is an operation, which reſembleth the *work of nature*, whereas other courſes, whereof we have ſpoken, are like the *work of the hand.* For as when a Carver cuts and carves

Pro L. Muræna.

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an Image, he ſhapes only that part whereupon he works, and not the reſt; as if he be faſhioning the Face, the reſt of the body is a rude and formleſs ſtone ſtill, till ſuch time as he come to it: but contrariwiſe, when *Nature* makes a Flower or *Living Creature*, ſhe ingenders and brings forth rudiments of all the parts at one time. So in obtaining vertues by *habit*, while a man practiſeth *Temperance*, he doth not profit much to *Fortitude*, and the like; but when we wholly dedicate and devote our ſelves to good and honeſt ends; look what vertue ſoever *ſuch ends* commends and commands our mind unto, we ſhall find our ſelves already inveſted and prediſpoſited with a kind of hability and propenſion to purſue and expreſs the ſame. And this may be that *State of Mind*, which is excellently deſcribed by *Ariſtotle*, and expreſſed with the Character, not of *vertue*, but a kind of *Divinity*, his words are theſe; *And with Immanity, we may not unaptly countre-ballance, that ability which is above humanity; Heroick or Divine Vertue:* and a little after, *for as Savage Creatures are incapable of Vice or Vertue; ſo is the Deity: but this ſtate is a thing higher than vertue; that, ſomewhat elſe than vice.* Indeed *Plinius Secundus*, from the licenſe of Heathen magniloquence, ſet forth the vertue of *Trajan*, not as an imitation, but as a pattern too Divine, when he ſaith, *That men need to make no other prayers to the Gods, but that they would continue as good and as gracious Lords to them, as* Trajan *had been.* But theſe are the prophane and unhallowed Airs of Heathens, who apprehend ſhadows greater than the body: but true Religion, and the Holy Chriſtian Faith, lays hold on ſubſtance it ſelf, imprinting upon mens Minds *Charity*, which is moſt properly called, *The bond of perfection*; becauſe it comprehends and faſtens all vertues together. Surely it is elegantly ſaid by *Menander* of *vain Love*, which is but a counterfeit imitation of *Divine Love*; *Amor melior ſophiſtâ lævo, ad humanam vitam*; by which words he inſinuates, *that good and decent carriage, is better learnt from* Love, *than from a* Sophiſt, *or an inept Tutor*; whom he calls *Left-handed*, becauſe with all his tedious Rules and Preceps, he cannot form a man ſo dexterouſly, and with that facility to value himſelf, and govern himſelf, as *Love* can do. So certainly, if a mans mind be truly inflamed with the *heat of Charity*, he ſhall be exalted to a greater degree of Perfection, than by all the *Doctrine of Morality*, which, indeed, is but a *Sophiſt* in compariſon of the other. Nay farther, as *Xenophon* obſerved truly, *That all other affections, though they raiſe the Mind, yet they diſtort and diſorder it by their extaſies and exceſſes; but only love doth at the ſame inſtant, dilate and compoſe the Mind.* So all other humane excellencies, which we admire; though they advance Nature, yet they are ſubject to *exceſs*; only *Charity* admits no exceſs. So we ſee the Angels, while they aſpired to be like God in Power, prevaricated and fell, *I will aſcend above the altitude of the clouds, I will be like the moſt high.* So man, while he aſpired to be like God in Knowledge, digreſſed and fell: *ye ſhall be like Gods knowing Good and Evil:* but by aſpiring to a ſimilitude of God's *Goodneſs* or *Love*, neither Man nor Angel ever was endangered, nor ſhall

Aforal. Nicom. lib. 7.

Paneg.

Coloſ. 3.

De Inſt. Cyri.

Eſa. 14.

Gen. 3.

shall be endangered. Nay, we are invited to this imitation, *Bless* Mat. 5. *them that curse you, and pray for them that despitefully use you, and persecute you; that you may be the sons of your father which is in Heaven: for he makes his Sun to rise on the Evil, and on the Good; and sends rain upon the just, and upon the unjust.* So in the first Platform of the Divine Nature, the Heathen Religion placeth Gods Attributes thus, Psal. 145. *Optimus Maximus*; and sacred Scripture speaks thus, *Misericordia ejus, supra omnia opera ejus.*

§ Wherefore we have now concluded this part of *Moral Knowledge* concerning the *Culture and Regiment of the Mind*; wherein if any from a contemplation of the Portions thereof, which we have strictly enumerated, doth judge that our labour is only this, *to Collect and Digest, into an Art or Science, that which hath been pretermitted by other writers, as matters of common sense and experience, and of themselves clear and perspicuous; let him freely enjoy his judgement*: yet in the mean time let him be pleased to remember what we premonisht at first; that our purpose was not to pursue the flourish and beauty of things; but their use and verity. Likewise let him a while ponder in his mind that invention of the Ancient Parable, touching the *two gates of sleep.*

Virg. Æn. 6. *Sunt geminæ somni Portæ, quarum altera fertur*
Cornea, qua veris facilis datur exitus umbris.
Altera candenti perfecta nitens Elephanto
Sed falsa ad Cœlum mittunt insomnia Manes.

A gate of *Ivory* is indeed very stately, but true Dreams pass through the *gate of Horn.*

IV. By way of suppliment, that observation about *Moral Knowledge*, may be set down, which is, *that there is a kind of relation and conformity between the Good of the Mind, and the Good of the Body.* For as the *Good of the Body* consists, as hath been said, of *Health, Beauty, Srength* and *Pleasure*: So the *Good of the Mind*, if we consider it according to the Axioms and Precepts of *Moral Knowledge*, we shall perceive tend to this point, *to make the mind sound, and discharg'd from perturbation; beautiful and graced with the ornaments of true decency; strong to all duties of life: Lastly, not stupid, but retaining an active and lively sense of pleasure, and honest recreation.* But these four, as in the body, so in the mind, seldom meet altogether. *For it is ease to* observe, that many have strength of wit and courage; who yet notwithstanding are infested with perturbations, and whose manners are little season'd with Elegancy and Beauty of Behaviour, in their doings: *Some again*, have an Elegancy and Fineness of Carriage, which have neither Soundness of Honesty, nor Substance of Sufficiency in their doings: *some have* honest Minds, purified from the stain of Guilt, which yet can neither become themselves, nor manage business: *Others* which perchance are capable of all these three Qualities; but possest a with sullen humour of Stoical sadness,

and

and ſtupidity, they practiſe virtuous Actions, but enjoy neither themſelves, nor the the fruit of their good Parts: and if it chance that of theſe four *two* or *three* ſometimes meet, yet a concurrence of all *four* very ſeldom falls out. And now we have concluded that Principal Member of *Humane Philoſophy*, which conſiders *Man, as he conſiſts of Body and Soul; but yet, as he is ſegregate and ſeparate from ſociety.*

THE

Eighth Book

OF

FRANCIS L. VERULAM

VICOUNT S^t. *ALBAN,*

OF THE

Dignity and Advancement

OF

LEARNING.

To the KING.

CHAP. I.

I. *The* Partition *of Civil Knowledge into the* Knowledge *of Converſation; the* Knowledge *of Negociation; and the* Knowledge *of Empire, or of State Goverment.*

THere is an ancient Relation (Excellent *King*) of a ſolemn Convention of many Philoſophers before the Ambaſſador of a forreign Prince, and how that every one according to their ſeveral abilities made demonſtration of their Wiſdom; that ſo the Ambaſſador might have matter of report touching the admired wiſdom of the Grecians: But amongſt theſe, one there was, as the ſtory goes, that ſtood ſtill and utter'd nothing in the aſſembly, inſomuch as the Ambaſſador turning to him ſhould ſay: *And what is your gift, that I may report it?* To whom the Philoſopher, *Report* (ſaith he) *unto your King, that you found one amongſt the Grecians that knew how to hold his peace:* and indeed, I had forgotten in this *compend of Arts* to interſert the *Art of ſilence*; which notwithſtanding (becauſe it is *Deficient*) I will teach by mine own Example. For Plutar. in Moral.

seeing the order and contexture of matter hath brought me at length to this point, that I must now a little after handle the *Art of Empire*; and being I write to so *Great a King*, which is so perfect a Master in this Science, wherein he hath been trained up even from his infancy; nor can I be altogether unmindful, what place I hold under your Majesty; I thought it would best become me in this point to approve my self unto your Majesty, by *Silence*, rather than by *Writing*. *Cicero* makes mention not only of an *Art*, but of a kind of *Eloquence* found in *Silence*: for after he had commemorated in an *Epistle to Atticus*, many conferences which had interchangeably past between him and another, he writeth thus; *In this place I have borrowed somewhat from your Eloquence, for I have held my peace.* And *Pindar* to whom it is peculiar suddenly to strike, as it were, with a Divine Scepter, the minds of men by rare short sentence, darts forth some such saying as this, *Interdum magis afficiunt non dicta quam dicta*: wherefore I have resolv'd in this part to be *Silent*, or which is next to *Silence*, to be very brief. But before I come to the *Arts of Empire*, some things by way of Preoccupation are to be set down concerning other *Portions of Civil Doctrine.*

Ad Atticum.

Pindar.

§ *Civil Science* is conversant about a subject, which of all other is most immers'd in matter, and therefore very difficultly reduced unto *Axioms*: yet there are many circumstances which help this difficulty: for first, *Cato* the Censor was wont to say of his Romans: *That they were like Sheep, a man were better drive a Flock of them, than one of them; for in a Flock, if you could get but some few to go right, you shall have all the rest follow of their own accord:* So in this respect indeed, the *Duty of Morality* is somewhat more difficult than that of Policy. *Secondly*, *Morality* propounds to it self that the Mind be imbued and furnisht with *Internal Goodness*; but *Civil Knowledge* requires no more but *Goodness External* only, for this, as respecting society, sufficeth. Wherefore it often comes to pass that the Government is Good, the Times Bad: for in Sacred Story the saying is often repeated, speaking of Good and Godly Kings, *And yet the People directed not their hearts to the Lord God of their Fathers*; wherefore in this respect also, the parts of Ethick are more austere and difficult. *Thirdly*, *States* have this nature, that like great Engines they are slowly moved, and not without great pains; whence it comes, that they are not so easily put out of frame: *For as in Ægypt* the seven good years upheld the seven bad; so in States, the good Government and Laws of the Precedent times cause, that the errors of succeeding times, do not quickly supplant and ruine: But the Decrees and Customs of particular persons, are more suddenly subverted: And this likewise doth charge Morality, but easeth Policy.

Plutar. in *M.* Catone.

I *Civil Knowledge* hath three parts, according to the three summary Actions of Society; *The Doctrine of Conversation*; *The Doctrine of Negociation*; *and the Doctrine of Empire or Republicks.* For there are three sorts of Good, which men seek to procure to themselves from civil Society; *Comfort against Solitude*, *Assistance in Business*, *and Protection* against Injuries: and these be three wisdoms distinct one from the other, and often times disjoyn'd;

Wisdom

Wisdom in Converſation; Wiſdom in Negotiation, and Wiſdom in Gubernation.

§ *As for Converſation*, certainly it ought not to be affected, but much leſs deſpiſed; ſeeing a wiſe moderation thereof, hath both an honour, and grace of Manners in it ſelf; and a powerful influence for the apt manage of Buſineſs; as well Publick, as Private. *For as Action in an Orator* is ſo much reſpected, (though it be but an outward quality) that it is prefer'd before thoſe other Parts which ſeem more grave and intrinſick; ſo *Converſation* and the government thereof, in a man of a Civil Practick life (however it conſiſteth in outward ceremonies) finds, if not the chiefeſt, yet certainly a very eminent place. Of what ſpecial importment the very *Countenance* is, and the compoſure thereof, the Poet inſinuates where he ſaith,

Nec vultu deſtrue verba tuo.

A man may cancel and utterly betray the force of his words, with his *Countenance*. Nay the *Deeds* as well as *Words* may likewiſe be deſtroyed by the *Countenance*, if we may believe *Cicero*, who when he would commend to his Brother *Affability* towards the Provincials ſaid, that *it* did not chiefly conſiſt in this, to give eaſie acceſs unto his Perſon, unleſs likewiſe he received them courteouſly even with his *Countenance*; *Nil intereſt habere eſtium apertum, vultum clauſum: It is nothing won, to admit men with an open door, and to receive them with a ſhut and reſerved countenance.* So we ſee *Atticus*, before the firſt interview between *Cæſar* and *Cicero* the war depending, did diligently and ſeriouſly adviſe *Cicero* by a letter touching the compoſing and ordering of his *countenance* and *geſture*. And if the government of the *Face* and *Countenance* alone be of ſuch effect, how much more is that of familiar *ſpeech* and other *carriage* appertaining to *Converſation*. And indeed the ſumm and abridgement of the Grace and Elegancy of Behaviour, is for moſt part comprized in this, *that we meaſure in a juſt ballance and maintain both our own Honour and the Reputation of others.* The true Model whereof *T. Livius* hath well aſcribed (though intended to another purpoſe) in the Character of a Perſon, *Left* (ſaith he) *I ſhould ſeem either arrogant or obnoxious; whereof the one is the humour of a man that forgets the liberty of another; the other of a man that forgets the liberty of himſelf.* But on the other ſide if *Urbanity and outward Elegancy of Behaviour* be intended too much, they paſs into a deformed and counterfeit *Affectation*. *Quid enim deformius quam ſcenam in vitam transferre. To Act a mans life.* But though they fall not by inſenſible degrees into that vitious extreme; yet too much time is conſumed in theſe ſmall matters; and the mind by ſtudying them is too much depreſs'd and broken. And therefore as Tutors and Preceptors uſe to adviſe young Students in Univerſities, too much addicted to keep company; by ſaying, *Amicos eſſe fures temporis:* ſo certainly this ſame continual intention of the mind upon the *comelineſs of Behaviour*, is a great thief to more ſolemn Meditations. *Again*, ſuch as are ſo exactly accompliſht *in Urbanity*, and ſeem, as it were, form'd by nature for this quality alone, are commonly of ſuch a diſpoſition,

De Petit. Conſulatus.

Lib. XII. Epiſt ad Att.

Livius.

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as pleaſe themſelves in this one habit only, and ſeldom aſpire to higher and more ſolid virtues: whereas on the contrary, thoſe that are conſcious to themſelves of a Defect this way, ſeek *Comelineſs* by *Reputation*; for where *Reputation* is, almoſt every thing becometh; but where *that* is not, it muſt be ſupplied by *Puntoes* and *Complements*. *Again*, there is no greater or more frequent impediment of Action than an overcurious obſervance of *Decency* and of that other ceremony attending on it, which is a too ſcrupulous *Election of time* and *opportunities*: for *Solomon* ſaith excellently, *qui obſervat ventum non ſeminat, & qui conſiderat nubes nunquam metet*: We muſt make opportunity oftner than find it. To conclude, this *comely grace of Behaviour* is, as it were, the Garment of the Mind, and therefore muſt have the conditions of a Garment: for firſt, it ought to be ſuch as is in faſhion; again, it ought not to be too curious or coſtly; then it ought to be ſo ſhaped as to ſet forth any good making of the mind, and to ſupply and hide any deformity; laſtly and above all, it ought not to be too ſtrait, or ſo to reſtrain the ſpirit, as to repreſs and hinder the motion thereof in buſineſs. But this part of *Civil knowledge* touching *Converſation*, hath been indeed elegantly handled, nor can it any way be reported as *Deficient*.

Eccleſ. 11.

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Chap. II.

I. The Partition *of the Doctrine of Negotiation into the knowledge of* diſperſed Occaſions. II. And into *the Knowledge of the Advancement of life.* § Examples *of the knowledge of Scatter'd Occaſions from ſome of* Solomon's *Parables.* § Precepts *touching the Advancement of fortune.*

THe knowledge touching *Negotiation*, we will divide into a knowledge concerning *Scatter'd Occaſions*; and the Knowledge concerning the *Advancement of Life*; whereof the one comprehends all the variety of *Buſineſs*, and is, as it were, the *Secretary* of a Practick courſe of life; the other only ſelects and ſuggeſts ſuch obſervations as appertain to the *advancing of a mans proper fortune*, which may be to every man as intimate and reſerved *Table-Books*, and *Memorials* of their Affairs.

§ But before we deſcend to the Particular kinds, we will ſpeak ſomething by way of Preface, in general, touching the *knowledge of Negotiation*. *The knowledge of Negotiation* no man hath handled hitherto according to the dignity of the Subject; to the great derogation of Learning, and the Profeſſors of Learning: for from this root ſpringeth that note of *Dulneſs* which hath defamed the Learned, which is; *That there is no great concurrence between Learning and Practick wiſdom.* For, if a man obſerve it well, of the three *wiſdoms* which we have ſet down to pertain to Civil life, that of *Converſation* is by learned men for the moſt part deſpiſed as a ſervile thing and an enemy to Meditation. As for that *wiſdom* concerning *Government*, Learned men

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acquit themſelves well, when they are called to the manage of Civil Affairs in ſtate; but that is a Promotion which happeneth to few. Concerning the *Wiſdom of Buſineſs* (whereof we now ſpeak) wherein man's life is moſt converſant; there be no Books at all written of it except, a handful or two of ſome few *Civil Advertiſements*, that have no proportion to the magnitude of this Subject. For if there were Books extant of this Argument, as of other, I doubt not, but Learned men with mean experience would far excel men of long experience without Learning; and *out-ſhoot them* (as they ſay) *in their own Bow*. Neither is there any cauſe why we ſhould fear leſt the Matter of this *Knowledge* ſhould be ſo various, that it could not fall under Precepts, for it is much narrower than the *Science of Government*, which notwithſtanding we ſee is exactly labour'd, and ſubdued. Of this kind of *Wiſdom*, it ſeems there have been ſome Profeſſors amongſt the *Romans* in their beſt and wiſeſt times. For *Cicero* reports that it was in uſe a little before his time for Senators, that had the name and opinion for wiſe and experienced men (the *Coruncanii*, *Curii*, *Lælii*, and others) to walk at certain hours in the *Forum*, where they might give acceſs and audience to the Citizens, and might be conſulted withall; not only touching *point of Law*, but of all *ſorts of Buſineſs*; as of the *Marriage of a Daughter*; or of the *bringing up of a Son*; *or of a Purchaſe*, *of a Bargain*, *of an Accuſation*, *Defence*; and every other occaſion incident to man's life. By this it plainly appears, that there is *a Wiſdom of giving Counſel and Advice* even in Private Buſineſs; ariſing out of an univerſal inſight into the Affairs of the World; which is uſed indeed upon Particular Cauſes, but is gathered by general obſervation of Cauſes of like nature. For ſo we ſee in the Book which *Q. Cicero* writeth unto his Brother, *De Petitione Conſulatus*, (being the only Book of Particular Buſineſs, that I know written by the Ancients) although it concerned ſpecially an Action then on foot, yet it contains in it many Politick Axioms, which preſcribe not only temporary uſe, but a perpetual direction in the caſe of Popular Elections. *And in this kind* nothing is extant which may any way be compar'd with thoſe Aphoriſms which *Solomon the King* ſet forth, of whom the Scriptures teſtifie, *That his Heart was as the Sands of the Sea*: For as the Sands of the Sea do incompaſs all the utmoſt bounds of the world; ſo his wiſdom comprehended all matters, as well humane as divine. In theſe *Aphoriſms* you ſhall clearly diſcover, beſides thoſe precepts which are more divine, many moſt excellent Civil precepts and advertiſements, ſpringing out of the profound ſecrets of *wiſdom*, and flowing over into a large field of variety. Now becauſe we report as *Deficient*, *the Doctrine touching diſperſed occaſions*, (which is a firſt portion of the *knowledge of Buſineſs*) we will, after our manner, ſtay a while upon it, and propound an example thereof, taken out of thoſe *Aphoriſms*, or *Parables* of *Solomon*. Neither is there, in our judgement, any cauſe of juſt reprehenſion, for that we draw from writers of ſacred Scripture, ſomething to a Politicall ſence; for I am verily of opinion, that if thoſe *Commentaries of the ſame Solomon were now extant concerning Nature* (wherein he hath written of all *Vegetables*, *From the Moſs upon the wall*, *to the Cedar of Libanus*; *and of living creatures*)

Cicero.

Q. Cicero de Petitione Conſul.

1. Reg. iv.

1. Reg. iv.

it were not unlawful to expound them according to a natural ſence; the ſame liberty we may take in the *Politicks.*

* AMANUENSIS VITÆ, ſive de occaſionibus Sparſis.

An Example of a Portion of the Doctrine concerning Diſperſed Occaſions, from ſome *Parables of Solomon.*

THE PARABLE.

Prov. xv.

I. *A ſoft Anſwer appeaſeth Wrath.*

THE EXPLICATION.

If the wrath of a Prince or of a great Perſon be kindled againſt thee, and it be now thy turn to ſpeak, *Solomon* gives in precept two points; one is, *that an anſwer be made*; the other, *that the ſame be ſoft:* The Firſt contains three precepts; *Firſt that you beware of a ſad, and ſullen ſilence:* for that either charges the fault wholly upon your ſelf, as if you had nothing to ſay for your ſelf; or cloſely appeacheth your Maſter of ſome injuſtice, as if his ears were not open to a juſt Defence. *Secondly that you beware of delaying and putting off a Buſineſs*, and that you crave not a longer day to give in your defence: for this procraſtination, either inſinuates the ſame prejudice the former did, (which is that your Lord and Maſter is led away with too much paſſion and partiality) and plainly betrays, that you are in diviſing ſome cunning and counterfeit Apology, ſeeing you have no preſent anſwer ready. Wherefore it is ever the beſt courſe to ſay ſomething inſtantly in your own defence, according as the occaſion of the preſent buſineſs ſhall adminiſter. *Thirdly that by all means, an anſwer be made*; an anſwer (I ſay) not a meer confeſſion or a meer ſubmiſſion, but yet not without ſome ſprinklings of an Apology and excuſe let fall here and there; nor is it ſafe to bear your ſelf otherwiſe, unleſs you have to deal with very generous and noble diſpoſitions; which are very rare. *It follows in the ſecond place*, that the anſwer made be ſoft and temperate; and not harſh and peremptory.

THE PARABLE.

Prov. xvii.

II. *A wiſe Servant ſhall have command over a reproachful Son, and ſhall divide the Inheritance among the brethren.*

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THE EXPLICATION.

IN all troubled and disagreeing Families, there ever ariseth up some servant, or gentle friend, powerful with both sides; which may moderate, and compound the differences of the Family; to whom, in that respect, the whole House, and the Master himself are engag'd and beholding. *This Servant*, if he aim only, at his own ends, cherishes and aggravates the Divisions of a Family; but if he be sincerely faithful, and upright, certainly he deserves much; so, as to be reckoned as one of the brethren; or at least, to receive a Fiduciary Administration of the Inheritance.

THE PARABLE.

III. *If a wise man contests with a Fool, whether he be in anger, or in jest, there is no quiet.* Prov. xxix.

THE EXPLICATION.

WE are often admonisht to *avoid unequal commerce*; in this sence, *not to contend with our Betters:* but it is a no less profitable instruction, which *Solomon* here sets down, *Not to undertake a worthless person*; for such a business is usually concluded upon terms of disadvantage; for to overcome is no victory, but to be conquer'd a foul disgrace: and it is all one in the heat of this engagement, whether we deal by way of jesting, or by way of disdain and scorn; for howsoever we change Copy, we are embased and made the lighter thereby; nor shall we handsomely come off with credit. *But* the worst inconvenience of all is, when the Person with whom we contend (as *Solomon* speaks) hath somewhat of the *Fool* in him; that is, if he be witless and wilful; have some heart, no brain.

THE PARABLE.

IV. *Lend not an Ear to all words that are spoken, lest perchance thou heares thy servant curse thee.* Eccles. vii.

THE EXPLICATION.

IT is a matter almost beyond belief, what disturbance is created by *unprofitable curiosity*, about those things which concern our personal interest: that is, when we make a too scrupulous enquiry after such secrets; which once disclosed and found out, do but cause molestation of mind, and nothing conduce to the advancing of our

deſigns. *For firſt there follows vexation and diſquietneſs of Mind*; being that all humane affairs are full of faithleſneſs and ingratitude; ſo as if there could be procured ſome enchanted glaſs, wherein we might behold the hatred, and whatſoever malice is any way raiſed up againſt us; it were better for us that ſuch a Glaſs, were forthwith thrown away and broken. *For ſlanders* of this nature, are like the impotent murmures of Leaves on Trees, and in ſhort time vaniſh. *Secondly, this Curioſity fills the mind with ungrounded jealouſies*, which is a capital enemy to Counſels, and renders them inconſtant and involv'd. *Thirdly, the ſame curioſity doth oftentimes fix evils, which of themſelves would fly away.* For it is a dangerous matter for to provoke mens conſciences, who if they think themſelves undiſcover'd are eaſily chang'd to the better; but if once they perceive themſelves diſmaskt, they drive out one miſchief with an other. Wherefore it was deſervedly judg'd, a point of great wiſdom in *Pompeius Magnus*, that he inſtantly burnt all *Sertorius*'s papers unperus'd by himſelf; or permitted to be ſo by others.

Plutar. in Pomp.

THE PARABLE.

Prov. VI. **V.** *Thy Poverty ſhall come as a Traveller, and thy Want as an armed Man.*

THE EXPLICATION.

IN this Parable, it is elegantly deſcribed how the ſhipwrack of Fortunes falls upon Prodigals, and on ſuch as are careleſs of their Eſtates; for Debt and Diminution of Stock comes upon them at firſt by inſenſible degrees, with ſoft-ſilent paces, like a Traveller, and is hardly perceived; but ſoon after *neceſſity invades him like an armed man*, that is, with ſo ſtrong and potent an arm, as there is no more reſiſtance to be made; ſo it was ſaid by the Ancients, *that of all things neceſſity was the ſtrongeſt.* Wherefore we muſt prevent the Traveller; and be well provided againſt the armed Man.

THE PARABLE.

Prov. IX. **VI.** *He that inſtructs a ſcorner, procures to himſelf a reproach; and he that reprehends a wicked man, procures to himſelf a ſtain.*

THE EXPLICATION.

Mat. 7. THIS Parable agrees with our Saviours Precept, *That we caſt not our Pearls before ſwine.* In this Parable the Actions of *Inſtruction*, and of *Reprehenſion* are diſtinguiſht; as alſo the Actions of a

ſcorner

ſcorner, and of a *wicked perſon*. Laſtly that which is retaliated, is differenced. For in the former part, loſt labour is return'd; in the latter, a ſtain and diſhonour is repaid. For when a man teacheth and inſtructeth a *ſcorner*, firſt, the time thus imployed is caſt away; and then others alſo deride his pains, as a fruitleſs deſign, and a labour ill placed: Laſt of all, the ſcorner himſelf deſpiſeth the knowledge, which he hath learned. But the matter is tranſacted with greater danger in the *reprehenſion of the wicked*; becauſe a wicked nature, not only gives no ear to advice, but turns head againſt his *Reprehender*, now made odious unto him; whom he either wounds preſently with contumelies; or traduces afterwards to others.

THE PARABLE.

VII. *A wiſe Son is the gladneſs of his Father; but a fooliſh Son is the ſadneſs of his Mother.* Prov.

THE EXPLICATION.

THe *joys* and *griefs domeſtical* of *Father* and *Mother* touching their Children, are here diſtinguiſht: for a wiſe and well-govern'd Son, is chiefly a comfort, to the Father, who knows the value of virtue, better than the Mother, and therefore more rejoyceth at the towardlineſs of his Son inclinable to goodneſs: yea, and it may be his education of him, that he hath brought him up ſo well; and implanted in his tender years the Civility of manners, by precepts and example, is a joy unto him. *On the other ſide*, the Mother is more griev'd, and diſcomforted at the calamity of a Son; both becauſe the affection of a Mother is more ſoft and tender; as alſo perchance, being conſcious of her too much indulgence, ſhe hath tainted and corrupted his tender years.

THE PARABLE.

VIII. *The memory of the Juſt is bleſt; but the name of the wicked ſhall putrifie.* Prov.

THE EXPLICATION.

HEre is diſtinguiſht the *Fame* of good men and of evil, ſuch as commonly falls out after Death: for the *Name* of good men, after envy is extinguiſht, (which cropt the bloſſom of their *Fame*, while they were alive) preſently ſhoots up and flouriſheth; and their *Praiſes* dayly encreaſe in ſtrength and vigor: but for wicked men (though their Fame through the partial favour of Friends, and of men of

their own faction last for a short time) a detestation of their *Name* springs up, and at last their transient glory exhales in infamy, and expires in a filthy and noisom odour.

THE PARABLE.

Prov. XI. IX. *He that troubles his own house shall inherit the wind.*

THE EXPLICATION.

A Very profitable admonition touching *Discord and Domestick breaches.* Many promise to themselves great matters, *by the dissentions of Wives*; or the *Dis-inheriting of Sons*; *or the* often *changing of Servants*; as if the Tranquillity of mind; or the administration of their affairs were by this means advanced, and should become more prosperous unto them. But commonly *their hopes turn to wind*; for those alterations, for most part, succeed ill, and those *Perturbers of their own house* oftentimes meet with many vexations, and ingratitudes from *them*, whom (passing by others) they adopted and loved: Nay, by this means they draw upon their Persons ill Reports, and doubtful rumours. For it is well noted of *Cicero*, *Omnem famam à Domesticis emanare.* Both these evils *Solomon* excellently expresses by the *inheritance of Winds:* For the *Frustrating of Expectation*, and the *raising of Rumours*, are rightly compared to *Winds.*

De Pet. Consul.

THE PARABLE.

Eccles. VII. X. *Better is the end of a Speech, than the beginning thereof.*

THE EXPLICATION.

THis Parable taxeth, and reforms a frequent error committed, not only by them which chiefly *study words*; but even by the more wise and grave. The error is this, *that men are more sollicitous of the ingress and entrance of their speech*; *than of the close and issue: and more exactly meditate the Exordiums and Prefaces*; *than the conclusions of Speeches.* But they should neither neglect those, and yet have these about them, as the more material parts, ready prepar'd and digested; considering with themselves, and, so far as may be, fore-casting in their minds, what may be the issue of speech and conference at last; and businesses thereby may be promoted and matured. Yet this is not all; for you must not only *study Epilogues, and conclusions of Speeches, which may be pertinent to business*; *but also regard must be taken of such Speeches, as may aptly and pleasantly be cast in, at the very instant of your departure, although they have no reference at all to the busines in hand.* I knew two Counsellors, Personages

Perſonages of high rank, and wiſe men; and on whom the charge of State-affairs did then principally depend; whoſe common, and, to them, peculiar cuſtom it was, that ſo often as they were to negociate with their Princes about their own affairs; never to cloſe their conference with any matter referring to that buſineſs; but ever ſeek diverſions, either by way of jeſt; or by ſomewhat that was delightful to hear; and ſo, as the Adages render it, *waſh over at the concluſion of all, their Sea-water diſcourſes, with freſh fountain water.* And this uſage was one of their chief Arts.

THE PARABLE

XI. *As dead Flies cauſe the beſt oyntment to ſend forth an ill Odour; ſo doth a little folly him that is in reputation for wiſdom and honour.* Eccleſ. x.

THE EXPLICATION.

THE caſe of Men remarkable *for eminent gifts*, is very unhappy and miſerable (as the *Parable* excellently notes,) becauſe their errors, be they never ſo ſmall find no remiſſion. *But as in a pure Diamond* every leaſt grain, or little cloud ſtrikes the eye, and affects it with a kind of trouble; which upon a more groſs Diamond would hardly be diſcerned: even ſo in men of eminent parts, the leaſt infirmities are preſently ſpied, talked of, and more deeply cenſur'd; which in men of more mean and obſcure gifts, and rank, would either altogether paſs without notice, or eaſily procure pardon. *Therefore a little Folly in a very wiſe man; and a ſmall offence in a very honeſt man; and a ſlight indecency of manners, in a man of Courtly and Elegant behaviour; much derogates from their fame and reputation.* So that it is not the worſt courſe for eminent perſons, *to mingle ſome abſurdities* (ſo it may be done without guilt) *in their Actions*; that they may retain a kind of liberty to themſelves, and confound the characters of ſmaller defects.

THE PARABLE.

XII. *Scornful men inſnare a City, but wiſe men divert Wrath.* Prov. xxix.

THE EXPLICATION.

IT may ſeem ſtrange, that *Solomon* in the deſcription of men made, as it were, and by nature fram'd to the ruine and deſtruction of a ſtate, hath choſen the character; *not of* a proud and inſolent man; *not of* a tyrannical and cruel nature, *not of* a raſh and violent man;

not

not of an impious and wicked perſon; *not of* a ſeditious and turbulent ſpirit; *not of* an incontinent and ſenſual inclination; *not of* a fooliſh and and unhabile Perſon; *but of a Scorner.* But this is a judgement worthy the wiſdom of that King, who beſt knew the grounds of the conſervation, or everſion of a State. For there is not commonly a like Plague to Kingdoms and Common-wealths, than if Counſellors of Princes, or Senators, and ſuch as ſit at the helm of Government, areby nature *Scorners.* For ſuch perſons, that they may win the reputation of undanted States-men, do ever extenuate the greatneſs of dangers, and inſult over thoſe that value dangers, according to the true weight; as timorous and faint-hearted natures. They *ſcoff* at all mature delays, and meditated debatings of matters by conſultation, and deliberation; as a thing too much taſting of an oratory-vein; and full of tedioufneſs; and nothing conducing to the ſum and iſſues of Buſineſs. *As for Fame*, at which the counſels of Princes ſhould eſpecially level, they contemn it, *as the ſpirit of the vulgar*, and a thing will be quickly blown over. *The Power* and Authority of Laws, they reſpect no more, than as cobwebs, which ſhould not inſnare matters of greater conſequence: *Counſels* and Precautions, foreſeeing events a far off, they reject, as meer dreams and melancholy apprehenſions: *men ſeriouſly* wiſe, and well ſeen in the world, and of great reſolution and counſel, they defame with gibes and jeſts: *in a word*, they do at once prejudice and weaken the whole foundation of Civil Goverument; which is the more to be looked into, becauſe the Action is performed by ſecret fraud, and not open force; and is a practice not ſo ſuſpected, as it demerits.

THE PARABLE.

Prov. xxix. XIII. *A Prince that lends a willing ear to lies, his ſervants are all wicked.*

THE EXPLICATION.

WHen a *Prince*, is of ſuch a temper, as to *lend an eaſie and credulous ear, without due examination, to Detractors and Sycophants*, there breaths a peſtilential Air from the *Kings* ſide; which *corrupts and infects all his ſervants.* Some feel out the fears and jealouſies of a *Prince*; and aggravate the ſame with feign'd reports. *Others* awake the furies of envy, eſpecially againſt the beſt deſerving in the ſtate: *Others* ſeek to waſh away their own guilt, and the ſtains of a foul conſcience, by defaming others: *Others* give ſail to the Honours and wiſhes of their friends, by traducing, and debaſing the merit of their competitors: *Others* compoſe Fabulous enterludes againſt their enemies, and concurrents, as if they were upon the ſtage; *and* infinite ſuchlike. And theſe are the Arts of ſuch ſervants to Princes, as are of a vile and baſe nature. But they that are of a more honeſt diſpoſition, and better civiliz'd, when they perceive their

their innocence to be no ſafe ſanctuary (in that their Prince knows not how to diſtinguiſh between truth and falſhood) they put off moral honeſty, and gather in the Court-winds; and are therewith carried about in a ſervile manner. For as *Tacitus* ſaith of *Claudius*. *There is no ſafety with that Prince, into whoſe head all things are conveyed, as it were, by infuſion and direction from others.* And *Commines* very well, *It is better to be ſervant to a Prince, whoſe jealouſies have no end, than to a Prince, whoſe Credulity hath no mean.*

THE PARABLE.

XIV. *A Juſt man is merciful to the life of his Beaſt; but the mercies of the wicked are cruel.* Prov. xii.

THE EXPLICATION.

THere is implanted in man by nature, a noble and excellent affection of *Piety and Compaſſion*, which extends it ſelf even to brute creatures, that are by divine ordination ſubject to *his* command: and this *Compaſſion* hath ſome Analogy with that of a Prince towards his ſubjects. Nay farther, it is moſt certain, that the more noble the mind is, the more compaſſionate it is; for contracted and degenerate minds think theſe things nothing to pertain to them; but the Mind, which is a nobler portion of the world, is affected in the groſs out of community. Wherefore we ſee that there were under the old Law, many Precepts, not ſo merely *Ceremonial*, as *Inſtitutions of Mercy*; ſuch as was that *of not eating fleſh with the blood thereof*, and the like: even in the ſect of the *Eſſeans* and *Pythagoreans*, they altogether abſtain'd from *eating Fleſh*; which to this day is obſerved by an inviolate ſuperſtition, by many of the Eaſtern people under the *Mogol*. Nay the Turks, (both by Deſcent and Diſcipline a cruel and bloody Nation) yet beſtow alms upon brute Creatures; and cannot endure to ſee the vexation and torture of any live thing. But leſt, what we have ſaid, ſhould perchance ſeem to maintain all kinds of *Mercy*; *Solomon* upon ſound advice annexeth, *That the mercies of the wicked are cruel*: Theſe *Mercies*, are, when lewd and wicked perſons are ſpar'd from being cut off by the ſword of juſtice; this kind of *Mercy* is more *Cruel*, than *Cruelty* it ſelf: for *Cruelty* is extended in practice on particulars; but this kind of *Mercy*, by a grant of impunity, arms and ſuborns the whole band of impious men againſt the innocent.

THE

THE PARABLE.

Prov. xxix. XV. *A Fool utters all his mind; but a wiſe man reſerves ſomewhat for hereafter.*

THE EXPLICATION.

THe Parable (it ſeems) eſpecially corrects; *not the futility* of vain Perſons, which eaſily utter, as well what may be ſpoken, as what ſhould be ſecreted: *not the bold roving language* of ſuch as without all diſcretion and judgement fly upon all men and matters: *Not Garrulity*, whereby they fill others even to a ſurfeit: *but another vice*, more cloſe and retired; namely *the Government of ſpeech*, of all adventures the leaſt prudent and politick, which is, *when a man ſo manages his ſpeech in private conference, as whatſoever is in his mind, which he conceives any way pertinent to the purpoſe and matter in hand, out it muſt at once, as it were, in one breath, and in a ſet continued diſcourſe:* this is that which doth much prejudice Buſineſs. *For firſt, a diſcontinued ſpeech*, broken off by interlocutions, and inſtill'd by parts, penetrates deeper, than a *ſetled continued ſpeech*; becauſe that in a continued Diſcourſe, the weight of Matters is not preciſely and diſtinctly taken, nor by ſome convenient reſts ſuffer'd to fix; but Reaſon drives out Reaſon before it be fully ſetled in the Comprehenſion of the Hearers. *Secondly* there is no man of ſo powerful and happy a Delivery of himſelf, as at the firſt onſet and encounter of his ſpeech, he is able ſo to ſtrike him dumb and ſpeechleſs, with whom he diſcourſeth; but that the other will make ſome interchangeable reply, and peradventure object ſomething, and then it may fall out, that what ſhould have been reſerv'd for refutation and replication, by this unadviſed anticipation being diſcloſed and taſted before-hand, looſeth its ſtrength and grace. *Thirdly* if a man diſcharge not all at once what might be ſaid, but deliver himſelf by *Parcels*, now one thing, anon caſting in another, he ſhall gather from the looks and anſwers of him with whom he diſcourſes, how every particular Paſſage affects him, and in what ſort they find acceptation; ſo as what is yet remaining to be ſpoken, he may with greater Caution either ſelect, or ſilence.

THE PARABLE.

Eccleſ. x. XVI. *If the diſpleaſure of a Great Man riſe up againſt thee, forſake not thy Place; for pliant demeanure pacifies great Offences.*

THE

THE EXPLICATION.

THe Parable gives in Precept, how a man ought to demean himself, having incurr'd the wrath and displeasure of his Prince. The Precept hath two branches. First *that he relinquish not his place*; Secondly, *that with caution and diligence he attend the Cure, as in case of some dangerous disease.* For men are wont after they perceive their Princes displeasure against them, to retire themselves from the execution of their charge and office; *partly* out of an impatience of disgrace; *partly* lest they should revive the wound by being in the Presence; *partly* that Princes may see their sorrow and humility; *nay sometimes* to resign up the Places and Dignities they held, into the hands of the Prince. But *Solomon* censures this way of *Cure*, as prejudicious and hurtful; and that upon a very good ground. *For first this course doth too much noise abroad the disgrace it self*; so as enemies and enviers become more confident to hurt, and friends more fearful to help him. *Secondly it comes to pass that the wrath of the Prince*, which perchance, if it had not been publisht, would have died of it self, is now become more fixt; and having once made way to his ruine, is carried on to his utter subversion. *Lastly, this retiring tasts somewhat of a malignant humour, and of one fallen out with the times; which cumulates the evil of Indignation, to the evil of suspicion:* Now the precepts for cure are these. *First, above all things let him take heed that he seem not insensible, or not so affected, as in duty he ought to be, for the Prince's displeasure, through a stupidity or stubbornness of mind:* that is, that he compose his countenance, not to a sullen and contumacious sadness; but to a grave and modest pensiveness; and in all matters of imployment, that he shew himself less pleasant, and chearful than he was wont to be; and it will promote his case to use the assistance and mediation of some friend, unto the Prince, which may seasonably insinuate, with what feeling grief he is inwardly afflicted. *Secondly let him carefully avoid all, even the least occasions whereby the matter, that gave the first cause to the indignation, might be reviv'd*; or the Prince take occasion to be again displeased with him, or to rebuke him for any thing, before others. *Thirdly, let him with all diligence seek out all occasions wherein his service may be acceptable to his Prince*; that he may shew both a prompt affection to redeem his fore-past offence; and *that his Prince may* understand what a good servant he may chance to be deprived of, if he thus cast him off. *Fourthly, that by a wise art of Policy, he either lay the fault it self upon others; or insinuate, that it was committed with no ill intention; or make remonstrance of their Malice, who accused him to the King*, and aggravated the matter above demerit. *Last of all, let him be every way circumspect and intent upon the Cure.*

THE PARABLE.

XVII. *The First in his own cause is Just; than comes the other Party and enquires into him.* Prov. xviii.

THE EXPLICATION.

THE firſt information in any cauſe, if it a little fix it ſelf in the mind of the Judge, takes deep root, and wholly ſeaſons and prepoſſeſſeth it; ſo as it can hardly be taken out, unleſs ſome manifeſt falſhood be found in the matter of Information; or ſome cunning dealing, in exhibiting and laying open the ſame. For a bare and ſimple defence, though it be juſt and more weighty, hardly compenſates the prejudice of the firſt information; or is of force of it ſelf to reduce the ſcales of Juſtice, once ſway'd down, to an equal weight. *Wherefore* it is the ſafeſt courſe both for the Judge, that nothing touching the proofs and merit of the cauſe, be intimated before hand until both parties be heard together; and the beſt for the Defendant, if he perceive the Judge preoccupated; to labour principally in this (ſo far as the quality of the cauſe will admit) to diſcover ſome cunning ſhift and fraudulent dealing practiſed by the adverſe party to the abuſe o the Ju d ge.

Prov. xxix.

THE PARABLE.

XVIII. *He that delicately brings up his ſervant from a child, ſhall find him contumacious in the end.*

THE EXPLICATION.

PRinces and Maſters, from the Counſel of *Solomon*, *muſt keep a mean in the diſpenſation of their Grace and Favour towards Servants.* The mean is three-fold; *Firſt that Servants be promoted by degrees and not by faults.* Secondly, *that they be now and then accuſtomed to repulſes:* Thirdly, (which Machiavel well adviſeth) *that they have ever in ſight before them ſomething whitherto they may farther aſpire.* For nnleſs theſe courſes be taken in the raiſing of ſervants, Princes ſhall bear away from their ſervants, inſtead of a thankful acknowledgement and dutiful obſervances, nothing but *diſreſpect and contumacy:* for from ſudden promotion ariſeth inſolency; from a continued atchievement of their deſires, an impatience of Repulſe: if the accompliſhment of wiſhes be wanting; alacrity and induſtry will likewiſe be wanting.

Machia. Diſcorſo ſopra. Liv.

THE PARABLE.

Prov. xxii.

XIX. *Seeſt thou a man of Diſpatch in his Buſineſs; he ſhall ſtand before Kings, he ſhall not be ranked amongſt mean men.*

THE

THE EXPLICATION.

AMongſt the qualities which Princes do chiefly reſpect and require in the choice of their ſervants, *celerity and alacrity in the Diſpatch of Buſineſs, is above all the reſt, moſt acceptable.* Men of *profound Wiſdom* are ſuſpected by Kings, as men too ſpeculative and penetrating, and ſuch as are able by the ſtrength of wit, as with an engine, to turn and wind their Maſters, beyond their comprehenſion and againſt their inclination. *Popular natures* are ſpighted as thoſe that ſtand in the light of Kings, and draw the eyes of the people upon themſelves. *Men of courage*, are commonly taken for turbulent ſpirits, and daring, more than is meet. *Honeſt men* and of an impartial upright converſation, are eſteemed too ſtiff and Stoical; nor ſo pliable as they ſhould be to the whole pleaſure of thoſe on whom they depend. *To conclude*, there is not any other good quality, which preſents not ſome ſhadow, wherewith the minds of Kings may not be offended; *only quickneſs of Diſpatch in the execution of commands, hath nothing in it which may not pleaſe.* Again, the motions of the minds of Kings are ſwift and impatient of delay; for they think they can do all things; only this is wanting, *that it be done out of hand*; wherefore above all other qualities, *celerity is to them moſt acceptable.*

THE PARABLE.

XX. *I ſaw all the living which walk under the ſun, with the ſucceeding young Prince, that ſhall riſe up in his ſtead.* Eccleſ. IV.

THE EXPLICATION.

THE parable notes the vanity of men who are wont to preſs and flock about the deſigned ſucceſſors of Princes: The root of this vanity is that Frenzie, implanted by nature in the minds of men, which is, that they too extremely affect their own projected hopes. *For the man is rarely found that is not more delighted with the contemplation of his future Hopes, than with the fruition of what he poſſeſſeth.* So further, *Novelty is pleaſing to mans nature, and earneſtly deſired.* Now in a ſucceſſour to a Prince theſe two concur, *Hope and Novity.* The Parable expreſſeth the ſame which was long ago utter'd firſt by *Pompeius* to *Sylla*, after by *Tiberius* touching *Macro*; *Plures adorare ſolem Orientem quam Occidentem.* Yet notwithſtanding Princes in preſent poſſeſſion, are not much mov'd with this fond humour; nor make any great matter of it, as neither *Sylla* nor *Tiberius* did, but rather ſmile at the levity of men, and do not ſtand to fight with *Dreams*; for *Hope* (as he ſaid) *is but the Dream of a man awake.* Tacit. Annal. 6. Plutar. in Pomp.

THE PARABLE.

Eccleſ. 1x. XXI. *There was a little City, and mann'd but by a few; and there was a mighty King that drew his army to it, and erected bulwarks againſt it, and intrench'd it round. Now there was found within the walls a poor wiſe man, and he by his wiſdom rais'd the ſiege, but none remembred that ſame poor man.*

THE EXPLICATION.

The Parable deſcribeth the depraved and malignant nature of Men: In extremity and ſtraits they commonly flie for ſanctuary to men of wiſdom and power, whom before they diſpis'd; but ſo ſoon as the ſtorm is gone, they become unthankful creatures to their conſervers. *Machiavel* not without reaſon propounds a Queſtion, *whether ſhould be more ingrateful to well deſerving Perſons, the Prince or the People?* But in the mean time, he taxeth them both of Ingratitude. Notwithſtanding, this vile dealing ariſeth not from the ingratitude of the Prince or People alone; but oft-times there is added to theſe *the envy of the Nobility*, who in ſecret repine at the event, though happy and proſperous; becauſe it proceeded not from themſelves; wherefore they extenuate the merit of the Act, and depreſs the Author.

Diſcorſo ſopra Liv. Lib. 1.

THE PARABLE.

Prov. 15. XXII. *The way of the ſlothful is a Hedge of Thorns.*

THE EXPLICATION.

THe Parable expreſſeth moſt elegantly, *that ſloth proves laborious in the end:* For a diligent and ſedulous preparation effects this, that the foot doth not ſtrike it ſelf againſt any impediment, but that the way is levell'd before it be gone. But he that is ſlothful and puts off all to the laſt point of Execution, it muſt needs follow, that continually, and at every ſtep he paſſes, as it were, through Briars and Brambles, which ever and anon entangle and detain him. The ſame obſervation may be made upon the governing of a Family, wherein if there be a care and providence taken, all goes on cheerfully, and with a willing alacrity, without noiſe or tumult: but if theſe fore-caſts be wanting, when ſome greater occaſions unexpected-

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ly fall out, all matters throng in to be diſpatched at once; the ſervants brawl; the whole houſe rings.

THE PARABLE.

XXIII. *He that reſpects Perſons in judgement doth not well; for that man will forſake the truth even for a piece of Bread.* Prov. xxviii.

THE EXPLICATION.

THe Parable moſt wiſely noteth that in a Judge, *Facility of Deportment is more pernicious than the corruption of Bribes:* for all perſons do not give Bribes; but there is hardly any cauſe wherein ſomewhat may not be found, that may incline the mind of the Judge, if *Reſpect of Perſons* lead him. For one ſhall be reſpected as a Country-man; another as an ill-tongu'd man; another as a Rich man; another as a Favourite; another as commended by a Friend; and to conclude, all is full of iniquity, where *Reſpect of Perſons bears rule*; and for a very ſlight matter, as it were, *for a piece of Bread*, Judgement is perverted.

THE PARABLE.

XXIV. *A poor man that by extortion oppreſſeth the poor, is like a land-flood that cauſes famine.* Prov. xxviii.

THE EXPLICATION.

THis Parable was by the Ancients expreſt and ſhadowed forth, under the Fable of the *two Horſe-leeches*, the Full and the Hungry: for *Oppreſſion coming from the Poor and neceſſitous perſons, is far more heavy than the Oppreſſion cauſed by the Full and Rich; becauſe it is ſuch as ſeeks out all Arts of Exaction, and all Angles for Money.* This kind of Oppreſſion was wont alſo to be reſembled to *ſpunges*, which being dry, ſuck in ſtrongly; not ſo, being moiſt. The *Parable* comprehends in it a fruitful Inſtruction, both to Princes, that they commit not the government of Provinces, or offices of charge to indigent and indebted perſons; as alſo to people that they ſuffer not their Kings to be diſtreſſed with too much want.

THE

THE PARABLE.

Prov. xxv. XXV. *A juſt man falling before the wicked, is a troubled fountain, and a corrupted ſpring.*

THE EXPLICATION.

THE Parable gives it in Precept, *that States and Republicks muſt above all things beware of an unjuſt and infamous ſentence, in any cauſe of grave importance, and exemplar in the face of the world; ſpecially where the guilty is not quitted, but the innocent is condemned.* For Injuries ravaging among private Perſons, do indeed *trouble*, and *pollute* the *waters of Juſtice*, yet as in the *ſmaller ſtreams*; but *unjuſt Judgements*, ſuch as we have ſpoken of, from which examples are derived, infect and diſtain the very *Fountains of Juſtice*: for when the *Courts of Juſtice* ſide with *Injuſtice*, the ſtate of things is turned, as into a *publick Robbery*, and it manifeſtly comes to paſs, *ut Homo Homini ſit Lupus.*

THE PARABLE

Prov. xxii. XXVI. *Make no friendſhip with any angry man; nor walk thou with a furious man.*

THE EXPLICATION.

BY how much the more devoutly the Laws of Friendſhip amongſt good men, are to be kept and obſerved, by ſo much the more it ſtands us upon to uſe all Caution, even at firſt in a prudent election of Friends. *In like manner the diſpoſition and humours of Friends, ſo far as concerns our perſonal intereſt, ſhould by all means be diſpenſed withall: but when they impoſe a neceſſity upon us, what quality of perſons we muſt put on, and ſuſtain; it is a very hard caſe, and an unreaſonable condition of Friendſhip.* Wherefore according to *Solomon's* Precept, it principally conduceth to Peace, and Safety in the courſe of this world, *that we intermingle not our affairs with Cholerick natures*, and ſuch as eaſily provoke and undertake Quarrels and Debates; for ſuch kind of Friends will daily eſpouſe us to Factions and Contentions; that we muſt of neceſſity be forced to break off all terms of Friendſhip; or elſe be wanting to our own perſonal ſafety.

THE

THE PARABLE.

XXVII. *He that conceals a fault seeks friendship; but he that repeats a matter, separates united friends.* PROV. XVII. 9.

THE EXPLICATION.

THE way to arbitrate differences, and to reconcile affections is of two sorts. *The one begins by an Amnesty, and passing over that which is past.* The other, *from a Repetition of wrongs, interlacing Apologies and Excusations.* For I remember the speech of a very wise Person, and a great States-man, which was to this effect; *He that deals about a Treaty of Peace, without any recapitulation of the terms of Difference, and falling out, he rather deludes mens minds with the sweetness of an Agreement, than compounds the differences, by equity and moderation of Right.* But *Solomon*, a wiser man than he, is of a contrary opinon, approves *Amnesty*, and prohibites *Repetition*, for in *Repetition*, there are these inconveniences, for that it is, as it were, *unguis in ulcere, the nail in the ulcer*; as also, *there is a danger of breeding a new Quarrel*, for the Parties at difference will never accord upon the terms of their falling out. And lastly, *for that in the issue, it brings the matter to Apologies:* but both the one and the other Party, would seem rather to remit an offence, than to admit of an excusation.

THE PARABLE.

XXVIII. *In every good work there shall be abundance; but where words do abound, there commonly is want.* PROV. XIV. 23.

THE EXPLICATION.

IN this Parable *Solomon separates the the fruit of the Labour of the Tongue, and of the Labour of the Hands; as if Wealth were the Revenues of the one, want the Revenues of the other.* For it commonly comes to pass, that they that talk much, boast many things, and promise great matters; receive no emolument from the things whereof they discourse: nay, rather such natures for most part are no way industrious, and diligent at work; but only feed and fill themselves with words, as with wind. Certainly, as saith the Poet,

——*Qui silet est firmus* ——

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for he that is conſcious to himſelf of proficiency in his indeavours, applauds himſelf inwardly, and holds his peace; but on the contrary, he that is guilty to himſelf of hunting after vain glory, talks many things, and reports wonders to others.

THE PARABLE.

Prov. xxvii. **XXIX.** *Open Reprehenſion is better than ſecret Affection.*

THE EXPLICATION.

THe Parable reprehends the ſoft nature of Friends, which will not uſe the priviledge of friendſhip, in admoniſhing their Friends with freedom and confidence, as well of their errors as of their dangers. *For what ſhall I do?* (will ſuch a tender hearted friend ſay) *or which way ſhall I turn my ſelf? I love him as dearly as any man can do; and if any misfortune ſhould befall him, I could willing impawn my own perſon for his redemption; but I know his diſpoſition, if I deal freely with him, I ſhall offend him, at leaſt make him ſad, and yet do no good; and I ſhall ſooner eſtrange him from my friendſhip, than reclaim him, or withdraw him from thoſe courſes, which he hath fixt and reſolved upon in his mind.* Such a friend as this, *Solomon* here reprehends, as weak and worthleſs; and that a man may reap more profit from a manifeſt Enemy, than from ſuch an effeminate Friend: for he may perchance hear that by way of reproach from an Enemy, which through too much indulgence was but faintly whiſper'd by a friend.

THE PARABLE.

XXX. *A wiſe man is wary of his ways; a cunning Fool ſeeks evaſions.*

THE EXPLICATION.

THere be two ſorts of wiſdom; *the one true and ſound, the other counterfeit and falſe, which* Solomon *doubts not to entitle by the name of* Folly. He that applies himſelf to the former, *takes heed to his way and footing, fore-ſeeing dangers, and ſtudying remedies; uſing the aſſiſtance of good men, muniting himſelf againſt the invaſions of the wicked; wary in his entrance and engagement upon a buſineſs, not unprepar'd of a retreat, and how to come off; attent upon advantages, couragious againſt encounters; with infinite other circumſtances, which reſpect the government of his ways and actions.* But that other kind wiſdom *is altogether made up of fallacies and cunning devices, and wholly relies upon circumventing of others, and caſting them according to the form of their own mould.* This wiſdom the Parable deſervedly rejects, not only as *Wicked, but alſo as fooliſh. For firſt* it is not in the number of thoſe things, which are in our own power; nor is

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it directed by any conſtant Rule; but new ſtratagems muſt every day be contrived, the old failing and growing out of uſe. *Secondly*, he that is once attainted with the fame and opinion of a *cunning crafty Companion*, hath deprived himſelf of a principal Inſtrument for the manage of his affairs, and a practical life, that is, *Truſt*; and ſo he ſhall find by experience all things to go *Croſs* to his deſires. *To conclude*, theſe Arts and Shifts, howſoever they promiſe fair, and much pleaſe ſuch as practiſe them; yet are they many times fruſtrated. Which *Tacitus* hath well obſerved, *Conſilia Callida & audacia, expectatione læta; tractatu dura; eventu triſtia.* Tacit.

THE PARABLE.

XXXI. *Be not too preciſely Righteous; nor make thy ſelf too exceſſively wiſe; why ſhould'ſt thou unſeaſonably ſacrifice thy ſafety?* Eccl. VII.

THE EXPLICATION.

THere are Times (ſaith *Tacitus*) *wherein too great vertues are expoſed to certain ruine.* And this fate befals men eminent for Vertue or Juſtice, ſometimes ſuddenly, ſometimes fore-ſeen a far off: and if theſe excellent parts be ſeconded by the acceſs of *wiſdom*, that is, that they are wary and watchful over their own ſafety, then they gain thus much, that their ruine comes ſuddenly, altogether by ſecret and obſcure counſels; whereby both envy may be avoided, and deſtruction aſſail them unprovided. As for that *Nimium*, which is ſet down in the Parable, (in as much as they are not the words of ſome *Periander*, but of *Solomon*, who now and then notes the evils in man's life, but never commands them) it muſt be underſtood, not of vertue it ſelf, in which there is no *Nimium* or exceſſive extremity, but of a vain and invidious Affectation and Oſtentation *thereof*. A point ſomewhat reſembling this, *Tacitus* inſinuates in a paſſage touching *Lepidus*, ſetting it down as a Miracle, that he had never been the Author of any ſervile ſentence, and yet had ſtood ſafe in ſo cruel and bloody times. *This thought* (ſaith he) *many times comes into my mind, whether theſe things are governed by Fate; or it lies alſo in our own Power to ſteer an even courſe void of Danger and Indignity, between ſervile Flattery and ſullen Contumacy.* Tacit. Hiſt. I. Annal. IV.

THE PARABLE.

XXXII. *Give occaſion to a wiſeman and his wiſdom will be increaſed.* Prov. IX.

THE EXPLICATION.

THe Parable diſtinguiſhes between that wiſdom which is grown, and and ripened into true Habit; and that which ſwims only in the Brain

and conceit, or is boasted in speech, but hath not taken deep root. For the one upon occasion presented, wherein it may be exercis'd, is instantly quickned, prepared, and dilated, so as it seems greater than it self: but the other which before occasion was quick and active, now occasion is given, becomes amaz'd and confused, that even he who presumed the possession thereof, begins to call into doubt whether the preconceptions of *such wisdom* were not meer Dreams, and empty speculations.

THE PARABLE.

Prov. XXVII. XXXIII. *He that praiseth his friend aloud, rising early, it shall be to him no better than a curse.*

THE EXPLICATION.

Moderate and seasonable Praises, and utter'd upon occasion, much conduce both to mens Fame and Fortunes; but immoderate, streporous, and unseasonably pour'd out, profit nothing, nay rather from the sence of this Parable they do much prejudice. For *first*, they manifestly betray themselves to proceed either from too extreme *Affection*, or from a too studied *Affectation*, to the end that him whom they have thus praised, they may by false acclamations demerit rather to themselves; than by just attributes adorn his person. *Secondly*, sparing and modest *Praises*, commonly invite such as are present to add something of their own to the commendations; Contrary wise profuse and immodest Praises, invite the hearers to detract and take away something. *Thirdly*, (which is the principal point) *too much magnifying a man* stirs up envy towards him; seeing all *immoderate Praises* seem to be a Reproach to others, who merit no less,

THE PARABLE.

Prov. XXVI. XXXIV. *As Faces shine in waters, so mens hearts are manifest to the wise.*

THE EXPLICATION.

THE *Parable distinguisheth between the Hearts of wise men and of other Men; comparing those to waters or glasses, which receive and represent the forms and Images of things; whereas the other are like to Earth, or rude stone, wherein nothing is reflected.* And the more aptly is the mind of a wise-man compar'd to a *Glass* or Mirror; because in a *Glass* his own *Image* may be seen together with the *Images* of others; which the eyes cannot do of themselves without a *Glass*. Now if the mind of a wise man be so capable, as to observe and comprehend such an infinite diversity of Natures and Customs, it remains

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to be endeavour'd, that it may become no leſs various in the Application, than it is in the Repreſentation,

Qui ſapit, innumeris Moribus aptus erit. Ovid. de A. A.

THus have we ſtaid perchance ſomewhat longer upon theſe *Parables of Solomon*, than is agreeable to the proportion of an example, being carried away thus far for the Dignity both of the matter it ſelf, and of the Author. Neither was this in uſe only with the Hebrews, but it is generally to be found in the wiſe men of ancient times; that if any mans obſervation lite upon any thing that was good and beneficial to the common practick courſe of life, he would reduce and contract it into ſome *ſhort ſentence* or *Parable*, or elſe *ſome Fable*. But for *Fables* (as we have noted elſewhere) they were in times paſt *Vicegerents*, and *ſupplements of Examples*; now that the times abound with *Hiſtory*, the aim is more right and Active, when the Mark is alive. But the form of writing which beſt agrees with ſo variable and univerſal an Argument (as is the handling of *negotiations and ſcatter'd Occaſions*) that would be of all other the fitteſt which *Machiavel* made choice of, for the handling of matters of *Policy and Government*; namely by *Obſervations or Diſcourſes*, as they term them, upon *Hiſtory* and *Examples*. For knowledge drawn freſhly, and, as it were in our view, out of *Particulars*, knows the way beſt to *Particulars* again; and it hath much greater life for Practice, when the *Diſcourſe* or *Diſceptation* attends upon the *Example*, than when the *Example* attends upon the *Diſceptation*: for here not only *Order* but *Subſtance* is reſpected. For when the *Example* is ſet down as the Ground of the *Diſputation*, it uſeth to be propounded with the preparation of circumſtances, which may ſometimes controul the *diſcourſe* thereupon made; ſometimes ſupply it; ſo it may be in place of a pattern for imitation and practice: whereas on the contrary, *examples* alledged for the *Diſputations* ſake, are cited ſuccinctly and ſimply, and as bondmen wait, in a ſervil aſpect, upon the commands of the *Diſcourſe*. But this difference is not amiſs to be obſerved, *that as Hiſtories of Times afford the beſt matter for Diſcourſes upon Politicks*, ſuch as are thoſe of Machiavel; *So the Hiſtories of lives, are the beſt Inſtructions for diſcourſe of Buſineſs*; becauſe they comprize all variety of *Occaſions and Negotiations*, as well great as ſmall. Lib. 2. cap. 13. Diſcorſo in Liv.

§ *Nay there is* a ground of Diſcourſe for *Precepts touching Buſineſs*, more accommodate than both thoſe *ſorts of Hiſtory*; which is, *when Diſcourſes are made upon Letters, but ſuch as are wiſe and ſerious*, as thoſe of *Cicero ad Atticum*, and others. For letters uſually repreſent Buſineſs more particularly, and more to the life; than either *Chronicles or Lives*. Thus have we ſpoken both of the Matter and Form of the firſt portion of the *Knowledge of Negotiation*, which handles *diſperſed Occaſions*; which we deliver up upon the accompts of *Deficients*.

II. There is alſo another portion of the *ſame Knowledge*, which differeth as much from that other, whereof we have ſpoken as *ſapere*, and *ſibi ſapere*: *for the one ſeems to move as it were, from the centre to the* FABER FORTUNÆ, ſive de Ambitu vitæ.

circumference; the other as it were, from the circumference to the centre. For there is a wisdom of giving Counsel unto others; and there is a wisdom of forecasting for his own fortunes; and these do sometimes meet, but more often sever. For many are exceeding wise in their own ways, which yet are weak for administration of civil affairs, or giving of Counsel, like the *Ant, which is a wise creature for it self, but very hurtful for the Garden. This wisdom* the Romans those excellent Patriots, did take much knowledge of; whereupon the Comical Poet saith, *Certainly the Mould of a wise mans Fortune is in his own hands*; yea it grew into an Adage among them,

Plaut. in Trin. Cic. in Par. Salust. ad Cæs. Lib. 1. Dec. iv.

Faber quisque Fortunæ propriæ——;

And *Livy* attributes the same virtue to *Cato Major: In this man there were such great abilities of wit and understanding, that into what climate soever his nativity had cast him, he seem'd to be able to command a fortune.* This kind of wisdom, if it be profest and openly declar'd, hath ever been thought not only impolitick, but an unlucky and ominous thing: as it was observed in *Timotheus* the *Athenian*, who after he had done many excellent services to the honour and utility of the state, and was to give an account of his government to the people, as the manner was, concluded every particular with this clause, *and in this, Fortune had no part:* but it fell out that he never prosper'd in any thing he took in hand afterwards. *This is in truth* too high and savouring of extreme arrogance, aspiring to the same point of Pride which *Ezekiel* records of *Pharaoh, Dicis fluvius est meus, & ego feci meipsum*; or of that which another Prophet speaks, *They exult and offer sacrifices to their net, and burn incense to their snare.* or of that which the Poet expresseth of *Mezentius* a Despiser of the *Gods.*

Plutar. in Sylla. Ezech. 29. Habac. 1. Virg. Æn. 10.

Dextra mihi Deus, & telum quod missile libro,
Nunc adsint.——

Finally Julius Cesar, never to my remembrance, betrayed the impotency of his hidden thoughts so much, as in a speech of like nature; for when the *Augur* gave him information *that the entrails were not prosperous*, he closely murmur'd to himself *Erunt lætiora cum volo*, which saying of his preceded not long before the misfortune of his death. *But this extremity of Confidence*, (as we have said) as it is an unhallowed thing, so was it ever unblest. And therefore they that were great Politicks indeed, and truly wise, thought it their safest course, ever to ascribe their successes to their Felicity; and not to their skill and virtue. So *Sylla* sirnam'd himself *Felix*, not *Magnus*; and Cæsar (more advisedly than before) saith to the *Pilot, Cæsarem vehis, & fortunam ejus.* But yet nevertheless these Positions; *Faber Quisque Fortunæ suæ. Sapiens dominabitur Astris. Invia virtuti nulla est via*, and the like; if they be understood and applied rather as spurs to industry, than as stirrops to insolency; and rather to beget in men courage and constancy of Resolutions, than Arrogancy and Ostentation; are deservedly accounted sound and healthful; and (no question) have been

Suet. in Julio. Plut. in J. Cæs.

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ever imprinted in the greateſt Minds, ſo ſenſibly, as ſometimes they can ſcarce diſſemble ſuch cogitations. *For we ſee Auguſtus Cæſar* (who compared with his uncle, was rather diverſe, than inferiour, but certainly a perſon more ſtaid and ſolemn) when he died, deſired of his friends that ſtood about his Bed, *that when he expired they would give him a Plaudite*; as if he were conſcient to himſelf, that he had plaid his part well upon the ſtage. Suet. in Auguſt.

This portion alſo of knowledge is to be ſumm'd up amongſt *Deficients*; not but that it hath been uſurped and frequented in Practice, far more exceſſively than is fittting; but becauſe books concerning *this Argument* are ſilent. *Wherefore* according to our cuſtom, as we did in the former; we will ſet down ſome heads or paſſages of it; and we will call it *Fabrum Fortunæ*, or as we have ſaid, ——*Doctrinam de Ambitu vitæ.*——Wherein, at the firſt view, I may ſeem to handle a new and ſtrange Argument, in teaching men how they may be *raiſers and makers of their own fortune*; a doctrine certainly to which every man will willingly yield himſelf a Diſciple, till he throughly conceives the difficulty thereof. *For* the conditions are neither lighter, or fewer, or leſs difficult to the Purchaſe of Fortune, than to the purchaſe of virtue; and it is as hard and ſevere a Thing to be a true *Politick*, as to be truly *Moral*. But the handling hereof concerns learning greatly, both in *Honour* and in *Subſtance*. For it is a principal point which nearly concerns the *Honour of Learning*, that Pragmatick men may know, *that Learning is not like ſome ſmall Bird, as the Lark, that can mount and ſing, and pleaſe her ſelf, and nothing elſe; but that ſhe holds as well of the Hawk, that can ſoar aloft, and after that when ſhe ſees her time, can ſtoop and ſeize upon her prey.* Again this kind of *wiſdom* much reſpects the *Perfection of Learning*; becauſe it is the right rule of a perfect enquiry, *that nothing be found in the Globe of Matter, that hath not a Parallel in the Chriſtalline Globe, or the Intellect:* That is, that there be not any thing in Being and Action, that ſhould not be drawn and collected into contemplation and Doctrine. Neither doth learning otherwiſe admire or eſteem *this Architecture of Fortune*, than as a work of an inferiour kind: for no mans proper fortune can be a retribution any way worthy the donation of his Eſſence and Being granted him from God; nay it often comes to paſs, that men of excellent gifts abandon their Fortunes willingly, that their minds may be vacant for more ſublime reſpects: yet nevertheleſs *Fortune*, as an Organ of virtue and merit, deſerves likewiſe her ſpeculation and Doctrine.

§ *Unto this knowledge* appertain precepts, ſome *ſummary* and Principal; ſome *ſpars'd* and *various*. Precepts *Summary* are converſant about the true knowledge *both of others*; *and of himſelf.* The *firſt Precept*, wherein the principal point of the *knowledge of others* doth conſiſt, may be determined this; that we procure to our ſelves, ſo far as may be, *that window* which *Momus* once required. He, when he ſaw in the frame of Mans heart, ſo many Angles and Receſſes, *found fault that there was not a window, through which a man might look into thoſe obſcure and crooked windings.* This *window* we ſhall obtain, if with all diligent circumſpection we purchaſe and procure unto our ſelves good information touching particular Perſons, with whom we nogotiate and have Plato de Rep.

to

to deal; as alſo of their natures, their deſires, their ends, their cuſtoms, their Helps and Advantages, whereby they are chiefly ſupported and are powerful; and again, of their weakneſſes and diſadvantages, and where they lie moſt open and are obnoxious; of their Friends, Factions, Patrons and Dependancies; and again of their Oppoſites, Enviers, Competitors; as alſo their Modes, Times, and Critical ſeaſons of eaſie Acceſs.

Virg. Æn. IV. *Sola viri molles Aditus, & tempora noris.*

Laſtly the Principles and Rules which they have ſet down to themſelves; and the like. And this information muſt be taken not only of *Perſons*, but of Particular Actions alſo which are on Foot, from time to time, and as it were hot upon the Anvil; how they are conducted and ſucceed; by whoſe furtherances they are favour'd, by whom oppos'd, of what weight and moment they are, and what conſequence they infer; and the like. *For the knowledge of preſent Actions* is not only material in it ſelf, but hath this advantage alſo, as without it the *knowledge of Perſons* will be very deceitful and erroneous: for *Men* change with the *Actions*; and while they are implicated in Actions, engaged and and environed with buſineſs, they are one; when they return to their Nature, they are another. Theſe *Informations* touching *Particulars*, reſpecting as well *Perſons* as *Actions*, are as the *Minor Propoſitions* in every *Active Syllogiſm:* for no verity or excellency of *Obſervations* or *Axioms* (whereof the *Major Propoſitions Politick* are made) can ſuffice to ground a concluſion, if there be error and miſtaking in the *Minor Propoſition*. And that ſuch knowledge may be compaſſed, *Solomon* is our ſurety, who ſaith—*Counſel in the Heart of a Man is like a deep water, but a wiſe man will draw it out.*—And although the knowledge it ſelf fall not under Precept, becauſe it is of Individuals, yet inſtructions for the deducing of it may with profit be ſet down.

Prov. XX.

§ The *knowledge of Men* ſix ways may be diſcloſed and drawn out; by their *Faces* and *Countenances*, by *Words*, by *Deeds*, by their *Nature*, by their *Ends*, and by the *Relations* of others. As for the *Viſage* and *Countenance*, let not the ancient Adage move us,

Juv. Sat. II. *Fronti nulla fides——*

For though this ſaying may not amiſs be meant of the outward and general compoſure of the *Countenance* and *Geſture*, yet there are certain ſubtil motions and labours of the *Eyes*, *Face*, *Looks*, and *Geſture*, whereby, as *Q. Cicero* elegantly ſaith, is unlockt and open'd—*Ianua quædam animi——the gate of the mind.* Who more cloſe than *Tiberius Cæſar?* But *Tacitus*, noting the Character and different manner of ſpeaking, which *Tiberius* us'd in commending in the Senate the great ſervices done by *Germanicus* and *Druſus*; of the commendations given of *Germanicus* he ſaith thus—*Magis in ſpeciem verbis adornata, quam ut penitùs ſentire crederetur*, of the commendations given of *Druſus* thus,---*Pancioribus; ſed intentior, & fidâ oratione.* Again *Tacitus* noting the ſame *Tiberius* at other times ſomewhat more clear and legible ſaith—*Quin*

De Pet. Conſ.

Annal. I.

Annal. IV.

ipſe

ipſe compoſitus aliàs & velut [a] *eluctantium verborum; ſolutiùs promptiúſq; loquebatur quoties ſubveniret.* Certainly there can hardly be found any Artificer of *Diſſimulation* ſo cunning and excellent, or a *Countenance* ſo forced, or as he ſaith —*vultus juſſus*— ſo commanded, that can ſever from an artificious and feigned ſpeech, theſe Notes; but that the ſpeech is either more *ſlight* and *careleſs*, or more *ſet* and *formal*, or more *tedious* and *wandring*, or more *dry* and *reluctant*, than uſual. [a] Orl. & velut elector anxius.

§ As for Mens *words* they are (as Phyſicians ſay of *Waters*) full of flattery and uncertainty; yet theſe counterfeit colours are two ways excellently diſcover'd; namely when *words* are uttered either upon the *ſudden*, or elſe in *paſſion*. So *Tiberius* being ſuddenly moved, and ſomewhat incens'd upon a ſtinging ſpeech of *Agrippina*, came a ſtep forth of his inbred diſſimulation.—— *Theſe words, ſaith* Tacitus *heard by* Tiberius, *drew from his dark covert Breaſt ſuch words as he us'd ſeldom to let fall*; and taking her up ſharply, told her her own in a Greek verſe. *That ſhe was therefore hurt becauſe ſhe did not reign.* Therefore the Poet doth not improperly call ſuch *Paſſions*—— *Tortures*— becauſe they urge men to confeſs and betray their ſecrets, Annal. IV.

Vino tortus & Ira—— Hor. Epiſt. I.

Experience indeed ſhews that there are few men ſo true to themſelves, and ſo ſetled in their reſolves, but that ſometimes upon heat, ſometimes upon bravery, ſometimes upon intimate good will to a Friend, ſometimes upon weakneſs and trouble of mind, that can no longer hold out under the weight of griefs; ſometimes from ſome other Affection or Paſſion, they reveal and communicate their inward Thoughts: but above all, it ſounds the mind to the bottom, and ſearcheth it to the quick, when Simulation is put to it by a counter-Diſſimulation according to the proverb of *Spain*, *Di Mentira, y ſacaras verdad, Tell a lye and find a Truth.*

§ Neither are *Deeds*, though they be the ſureſt pledges of mens minds, altogether to be truſted without a diligent and judicious conſideration of their *Magnitude* and *Nature*: For the ſaying is moſt true, *That fraud erects it ſelf a countermure of credit in ſmaller matters, that it may cheat with better advantage afterwards.* The *Italian* thinks himſelf *upon the Croſs with the Cryer*, and upon the point to be bought and ſold, when he is better uſed than he was wont to be, without manifeſt cauſe: for ſmall favours, they do but lull men a ſleep, both as to *caution*, and as to Induſtry, and are rightly called by *Demoſthenes Alimenta ſocordiæ*. Again, we may plainly ſee the falſe and inconſtant propriety and nature of ſome *Deeds*, even of ſuch as are accounted *Benefits*, from that particular which *Mutianus* practis'd upon *Antonius primus*, who upon that hollow and unfaithful reconcilement made between them, advanced many of the Friends of *Antonius*, and beſtowed *upon them Tribuneſhips, and Captainſhips liberally*: by this ſubtile pretence of demerit, he did not ſtrengthen, but altogether diſarm and deſolate *Antonius*, and win from him his Dependances, and made them his own creatures. Demoſt. Tacitus Hiſt. IV.

§ But

§ But the ſureſt key, to unlock the minds of Men, *conſiſts in ſearching and diſcloſing either their Natures and diſpoſitions, or their ends and intentions.* And certainly the weakeſt and ſimpleſt ſort of men are beſt interpreted by their *Natures*; but the wiſeſt and more reſerved are beſt expounded by their *Ends.* For it was wiſely and pleaſantly ſaid (though in my judgement very untruly) by a *Nuntio* of the Popes, returning from a certain Nation, where he ſerved as *Leidger*, whoſe opinion being askt, touching the appointment of one to go in his place, gave counſel, *that in any caſe his Hol. would not ſend one too wiſe, becauſe, ſaid he, no wiſe man would ever imagine, what they in that country were like to do.* Certainly it is a frequent error, and very familiar with wiſe men, to meaſure other men, by the Module of their own abilities; and therefore often ſhoot over the mark, ſuppoſing men to project and deſign to themſelves deeper ends, and to practiſe more ſubtil Arts, and compaſt reaches, than indeed ever came into their heads, which the *Italian* Proverb elegantly noteth, ſaying,

Dì Denâri, dì Sénno, e dì Féde
C'n'è Mánco ché non Créde.

There is commonly leſs Mony, leſs Wiſdom, and leſs good Faith than men do accompt. Wherefore if we be to deal with men of a mean and ſhallow capacity, becauſe they do many things abſurdly, the conjecture muſt be taken rather from the proclivity of their *Natures*, than the deſigns of their *ends.* Furthermore, *Princes* (but upon a far other reaſon) are beſt interpreted by their *Natures*; and *private perſons by their ends.* For *Princes* being at the top of humane Deſires, they have, for the moſt part, no particular ends propounded to themProv. 25. ſelves, whereto they aſpire, ſpecially with vehemency and perſeverance; *by the ſite and diſtance of which ends*, a man might take meaſure and ſcale of the reſt of their *Actions*, and *Deſires*; which is one of the chief cauſes *that their Hearts* (as the Scripture pronounceth) *are inſcrutable.* But private perſons are like Travellers which intentively go on aiming at ſome *end* in their journey, where they may ſtay and reſt; ſo that a man may make a probable conjecture and preſage upon them, what they would, or would not *Do:* for if any thing conduce unto their ends, it is probable they will put the ſame in execution; but if it croſs their deſigns, they will not. *Neither* is the information touching the diverſity of mens *ends* and *natures*, to be taken only *ſimply*, but *comparatively* alſo; as namely *what affection and humor have the predominancy and command of the reſt?* So we ſee, when *Tigellinus* ſaw himſelf outſtript by *Petronius Turpilianus* in adminiſtring and ſuggeſting pleaſures to *Neroes* humor, —*Metus e-*Annal. XIV. *jus rimatur*— ſaith *Tacitus*, he wrought upon *Neroes Fears*, and by this means brake the neck of his Concurrent.

§ *As for the knowing of mens minds at ſecond hand from Reports of others*, it ſhall ſuffice to touch it briefly. *Weakneſſes and faults you ſhall beſt learn from enemies; vertues and abilities, from friends; cuſtoms and times, from ſervants; cogitations and opinions, from intimate*

mate confidents, with whom you frequently and familiarly discourse. Popular fame is light, and the judgement of superiours uncertain; for before such, men are more maskt;

——*Verior Fama è Domesticis emanat*—— Q. Cic. de Pet. Con.

But to all this part of enquiry, the most compendious way resteth in three things. *First*, to have general acquaintance and inwardness with those which have most lookt into the world, and are well verst both in men and matters; but especially to endeavour to have privacy and conversation with some particular friends, who according to the diversity of Business and Persons, are able to give us solid information, and good intelligence of all passages. *Secondly*, to keep a *discreet temper* and *mediocrity*, both in liberty of speech and *Taciturnity*; more frequently using *liberty*, but *secrecy* where it imports. *For liberty of speech invites and provokes others to use the same liberty to us again; and so brings much to a mans knowledge; but silence induceth trust and inwardness, so as men love to lay up their secrets with us as in a closet.* *Thirdly*, we must by degrees acquire the *Habit of a watchful and present wit*, so as in every conference and action we may both *promote the main matter in hand, and yet observe other circumstances that may be incident upon the Bye.* For as *Epictetus* gives it in Precept, a Philosopher in every particular action, should say thus to himself, *I will do this also, and yet go on in my course.* So a *Politick* in every particular occurrence should make this account and resolution with himself; *And I will do this likewise, and yet learn something that may be of use hereafter.* And therefore they who are of such a heavy wit and narrow comprehension, as to overdo one particular, and are wholly taken up with the business in hand; and do not so much as think of any matters which intervene (a weakness that *Montaigne* confesses in himself) such indeed are the best instruments of Princes and of State; but fail in point of their own *Fortune.* But in the mean time, above all things caution must be taken, *that we have a good stay, and hold of our selves, by repressing a too active forwardness of dispostion*; lest that this knowing much, do not draw us on to much meddling; for nothing is more unfortunate, than light and rash intermeddling in many matters. So that this *variety of knowledge of Persons and Actions*, which we give in Precept to be procured, tends in conclusion to this; to make a judicious choice both of those *Actions* we undertake, and of those *Persons* whose advice and assistance we use, that so we may know how to conduct our affairs with more dexterity and safety.

Epict. Enchir. Essays.

§ *After the knowledge of others* follows the *knowledge of our selves*; for no less diligence, rather more, is to be taken in a true and exact understanding of *our own Persons*; *than of the Persons of others*, for the Oracle, *Nosce Teipsum*, is not only a rule of universal Prudence, but hath a special place in *Politicks*; for as St. *James* excellently puts us in mind, *that he that views his Face in a Glass, yet instantly forgets what one he was*; so that there is need of a very frequent inspection. The same holds also in Civil Affairs; but there are indeed

Jacob. 1.

divers *Glaſſes*; for the *Divine Glaſs* in which we muſt look our ſelves, is the Word of God; but the *Politick Glaſs* is nothing elſe but the State of the World and times wherein we live. *Wherefore* a man ought to take an exact examination, and an impartial view (not ſuch as uſeth to be taken by one too much in love with himſelf) of his own abilities, vertues and ſupports; as likewiſe of his own defects, Inabilities, and Impediments; ſo making his accounts, that he ever eſtimate *theſe* with the moſt, *thoſe* rather with the leaſt; and from this view and examination, theſe points following come into conſideration.

§ *The firſt Conſideration ſhould be, how a man's individual conſtitution and moral temper ſorts with the general ſtate of the times; which if they be found agreeable, then he may give himſelf more ſcope and liberty, and uſe his own nature; but if there be any antipathy and diſſonancy, then, in the whole courſe of his life, he ſhould carry himſelf more cloſe retired, and reſerved.* So did *Tiberius*, who being conſcient of his own temper, not well ſorting with his times, was never ſeen at publick Plays: and came not into the Senate in twelve of his laſt years: whereas on the contrary *Auguſtus* lived ever in mens eyes, which alſo *Taci-*
Annal. 1. *tus* obſerved: *Alia Tiberio Morum via*; the ſame reaſon too was to ſecure his perſon from danger.

§ *The ſecond Conſideration ſhould be how a man's nature ſorts with the profeſſions and courſes of life, which are in uſe and eſteem, and whereof he is to make his choice; that ſo if he have not yet determined what race to run, or what courſe of life to take, he may chuſe that which is moſt fit and agreeable to his natural diſpoſition; but if it he be engaged already in a condition of life, to which by nature he is not ſo fitted, let him make a departure at the firſt opportunity, and take another Profeſſion.* This we ſee was done by *Valentine Borgia*, that was deſign'd by his father to a Sacerdotal profeſſion, which, obeying the bent of his own nature, he quitted ſoon after, and applied himſelf to a Military courſe of life; though as equally unworthy the dignity of a Prince as of a Prieſt, ſeeing the peſtilent Man hath diſhonoured both.

§ *The third Conſideration ſhould be how a man may be valued, and may deport himſelf as he is compar'd with his Equals and Rivals, whom it is likely he may have Competitors and Concurrents in his Fortune, and that he take that courſe of life wherein there is the greateſt ſolitude of able men; and himſelf like to be moſt eminent.* Thus *Julius Cæſar* did, who at firſt was an Orator or Pleader, and was chief converſant in Gown-Arts of Peace; but when he ſaw *Cicero*, *Hortenſius* and *Catulus* to excel in the glory of Eloquence, and no man eminent for the Wars but *Pompeius*, he forſook his courſe, and bidding a long farewell to a civil and popular Greatneſs, transfer'd his deſigns to the Wars, and to the Martial Greatneſs; by which mean he aſcended to the top of Sovereignty.

The fourth Conſideration may be, that in the choice of friends and inward dependances, a man conſult his own nature and diſpoſition, and proceed according to the compoſition of his own temper; for different conſtitutions require different kinds of friends to comply withall; to ſome

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men, ſolemn and ſilent natures, to others bold and boaſting humours are acceptable; and many of the like ſort. Certainly it is worth the obſervation, to ſee of what diſpoſition the friends and followers of *Julius Cæſar* were, (as *Antonius, Hirtius, Panſa, Oppius, Balbus, Dolabella, Pollio*, the reſt) theſe were wont to ſwear, *ità vivente* Cæſare *moriar*; bearing an infinite affection to *Cæſar*, but towards all others diſdainful and arrogant, and they were men in publick Buſineſs active and effectual; in fame and reputation, not ſolemn and celebrated.

The fifth Conſideration may be that a man take heed how he guide himſelf by Examples, and that he do not fondly affect the Imitation of others; as if that which is pervious to others, muſt needs be as patent to him, never conſidering with himſelf what difference perhaps there is betwixt his and their natures and carriages, whom he hath choſen for his pattern and example. This was manifeſtly *Pompeius*'s error, who, as *Cicero* reports it, was wont often to ſay, *Sylla potuit, Ego non potero?* wherein he was much abuſed, the nature and proceedings of himſelf and *Sylla*, being the unlikelieſt in the world; the one being fierce, violent, and preſſing the fact; the other ſolemn, reverencing Laws, directing all to Majeſty and Fame; and therefore the leſs effectual and powerful to go thorough with his deſigns. There are more Precepts of this nature, but theſe ſhall ſuffice for Example to the reſt.

§ *Nor is the well underſtanding, and diſcerning of a man's ſelf ſufficient, but he muſt conſult with himſelf upon a way how he may aptly and wiſely open and reveal himſelf, and in ſumm, become flexible and moulded to the ſeveral forms and impreſſions of occaſions.* As for the *Revealing of a man's ſelf*, we ſee nothing more uſual, than for the leſs able man to make the greater ſhew. Wherefore it is a great advantage to good parts, if a man can by a kind of Art and Grace *ſet forth himſelf to others*, by aptly *revealing* (ſo it be done without diſtaſte or arrogance) his Vertues, Merits and Fortune; and on the contrary by covering artificially his weakneſſes, defects, misfortunes and diſgraces; ſtaying upon thoſe, and as it were, turning them to the light; ſliding from theſe, and leſſening them by an apt expoſition, and the like. *Wherefore Tacitus* ſaith of *Mucianus*, who was the wiſeſt man and the greateſt Politick of his time, *Omnia quæ dixerat fecerátq; Arte quâdam oſtentator. This ſetting forth of a man's ſelf* requires indeed ſome Art, leſt it turn tedious and arrogant; but yet ſo, as ſome kind of *Oſtentation*, though it be to the firſt degree of vanity, ſeems rather a vice in the *Ethicks*, than in the *Politicks*. For as it is uſually ſaid of *Slander, Audacter calumniare, ſemper aliquid hæret.* So it may be ſaid of *Oſtentation* (unleſs it be in a groſs manner deform'd and ridiculous) *Audacter te vendita, ſemper aliquid hæret*; it will ſtick certainly with the more ignorant and inferiour ſort of men, though the more wiſe and ſolemn ſmile at it, and deſpiſe. *Therefore the Eſtimation won with many, ſhall countervail the diſdain of a few.* But if this *Oſtentation of a man's ſelf*, whereof we ſpeak, be carried with decency and diſcretion; for example, if it make ſhew of a native candor and inbred ingenuity; or if it be aſſum'd at times, when other Perils approach (as in Military perſons in time of War) Hiſt.

or at times when others are moſt envied, or if words which reſpect a mans *own Praiſe*, ſeem to fall from him in a careleſs paſſage, as intending ſomething elſe, without dwelling too long upon them, or being too ſerious; or if a man ſo *grace himſelf*, as with equal freedom, he forbears not to tax and jeſt at himſelf; or in ſum, if he do this not of his own accord, but as urg'd and provokt by the inſolencies and contumelies of others, it doth greatly add to a mans Reputation. *And ſurely* not a few (more ſolid than windy natures, and therefore want the Art of bearing up ſayl in the height of the winds;) ſuffer for their moderation, not without ſome prejudice, and diſadvantage to their reputation and merit. *But for theſe* Flouriſhes and enhancements of vertue, howſoever ſome of weak judgement, and perchance too ſeverely Moral, may diſallow, no man will deny this, but that we ſhould endeavour at leaſt, that vertue thorow careleſs negligence be not diſvalued, and imbaſed under the juſt price. *This diminution* of the value, and abating the price in eſtimating Virtue, is wont to fall out three wayes. *Firſt when* a man offers and obtrudes himſelf and ſervice in matters of imployment not call'd nor ſent for; ſuch prompt offices as theſe are reputed well rewarded, if they be not refuſed. *Secondly when* a man in the beginning and firſt on-ſet of an imployment, too much abuſeth his own forces and abilities, when that which ſhould have been performed by degrees, he laviſheth out all at once; which in matters well managed, wins early grace and commendation, but in the end induceth ſatiety. *Thirdly when* a man is too ſuddenly ſenſible, and too inconſiderately tranſported with the fruit of his vertue, in commendation, applauſe, honour, favour confer'd upon him; and is too much affected and delighted therewith: of this point there is a wiſe Aviſo. *Beware leſt you ſeem unacquainted with great matters, that are thus pleas'd with ſmall, as if they were great.*

§ *But the covering of Defects is of no leſs importance than a wiſe and dexterous oſtentation of vertues. Defects are conceal'd and ſecreted by a three fold induſtry, and as it were under three coverts, Caution, Colour, and Confidence. Caution* is that, when we do wiſely avoid to be put upon thoſe things for which we are not proper; whereas contrariwiſe bold and unſtaid ſpirits will eaſily engage themſelves without judgement, in matters wherein they are not ſeen, and ſo publiſh and proclaim all their imperfections. *Colour* is when we do warily and wiſely prepare and make way, to have a favourable and commodious conſtruction made of our faults and wants; as proceeding from a better cauſe, or intended for ſome other purpoſe than is generally conceiv'd: for of the Covert of Faults the Poet ſaith well,

Ovid. *Sæpe latet vitium proximitate Boni.*

Wherefore if we perceive a *Defect* in our ſelves, our endeavour muſt be to borrow and put on the *Perſon* and *Colour* of the next bordering Vertue, wherewith it may be ſhadowed and ſecreted. For inſtance, he that is *Dull*, muſt pretend *Gravity*; he that is a *Coward*, *Mildneſs*, and ſo the reſt. And it will advantage, to frame ſome probable cauſe, and to give it out and ſpread it abroad, that induced us to diſſemble

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our abilities and not do our best; that so *making a Vertue of Necessity*, what was not in our *power*, may seem not to have been in our *will* to do. *As for Confidence*, it is indeed an impudent, but the surest and most effectual remedy; namely that a man profess himself to despise and set at naught, what in truth he cannot attain; according to the Principle of wise Merchants, with whom it is familiar to raise the price of their own Commodities, and to beat down the price of others. *But there* is another kind of *Confidence* far more impudent than this, which is to *face out a mans own Defects*, to boast them and obtrude them upon Opinion; as if he conceiv'd that he was best in those things, wherein he most fails; and to help that again, that the Deception put upon others may come off more roundly, he may feign, that he hath least opinion of himself in those things, wherein he is best. *Like* as we see it commonly in Poets; for a Poet reciting his verses, if you except against any verse, you shall presently hear him reply, *And for this verse it cost me more labour than the rest*; and then he will bring you some other verse, and seem to disable and suspect that rather, and ask your judgement of it, which yet he knows to be the best in the number, and not liable to exception. *But above* all, in this *Helping a mans self in his carriage*, namely, that a man may set the fairest gloss upon himself before others, and right himself in all points, nothing, in my opinion, avails more, *than that a man do not dismantle himself and expose his person to scorn and injury by his too much Goodness and Facility of Nature; but rather in all things shew some sparkles and edge of a free and generous spirit, that carries with it as well a sting, as Hony.* Which kind of fortified carriage, together with a prompt and prepared resolution to vindicate a mans self from scorn, is imposed upon some by accident and a kind of an invitable necessity, for somewhat inherent in their person or fortune; as we see it in Deformed Persons and Bastards, and in Persons any way disgrac'd; so that such natures, if they have any good parts, commonly they succeed with good felicity.

§ *As for the declaring of a Mans self*, that is a far different thing from *Ostentation*, or the *Revealing of a mans self*, whereof we spake even now; for it refers not to Mens *abilities* or *weaknesses*, but to the *Particular Actions* of life; in which point, *nothing is more Politick, than to observe a wise and discreet mediocrity in the disclosing or secreting the inward intentions and meanings of the mind touching particular Actions.* For although depth of secrecy and concealing of Counsels, and that manner of managing Business, when men set things awork by dark, and as the French stiles it, *Sourdes Menees*, *sourd Arts*, *close Carriages*, be a thing both prosperous and admirable; yet many times it comes to pass, as the saying is, *That Dissimulation begets errors, and illaqueates the Dissembler himself.* For we see the ablest men, and greatest *Politicks* that ever were, have made no scruple of it, openly to profess, freely and without dissimulation, the ends they aim at: so *L. Sylla* made a kind of profession, *That he wisht all men happy or unhappy as they stood his friends or enemies:* So *Cæsar* when he went first into *Gaul* confidently profest, *That he had rather be first in an obscure village, than second at Rome:* the same *Cæsar* when the war was now begun did not play

Plutar. in Sylla. Plutar. in J. Cæs.

play the diſſembler, if we obſerve what *Cicero* reports of him; *the other* (meaning of Cæſar) *refuſeth not, nay in a ſort deſires, that, as matters ſtand, he may ſo be called Tyrant.* So we may ſee in a letter of *Cicero's* to *Atticus*, how far from a *Diſſembler Auguſtus Cæſar* was, who in his very entrance into Affairs, while he was a darling to the Senate, yet in his Harangues and ſpeeches to the People was wont to ſwear after this manner, *Ità parentis honores conſequi liceat*, which was no leſs than the Tyranny; ſave that, to help the matter a little, he would withal ſtretch forth his hand to a ſtatue of *Iulius Cæſars*, which was erected in the *Roſtra:* and men laught and applauded, and wondred and diſcourſed thus amongſt themſelves, *what means this? What a young man have we here?* and yet thought he meant no hurt, he did ſo candidly and ingenuouſly ſpeak what he meant. *And all theſe*, we have nam'd, were proſperous: Whereas on the other ſide, *Pompeius*, who tended to the ſame ends, but by more umbragious and obſcure ways (as *Tacitus* ſaith of him, *Occultor non melior*; a cenſure wherein *Saluſt* concurrs, *Ore probo, Animo inverecundo,*) made it his deſign, and endeavoured by infinite engines, that deeply hiding his boundleſs deſires and ambition, he might in the mean ſpace caſt the ſtate into an Anarchy and Confuſion, whereby the ſtate muſt neceſſarily caſt it ſelf into his arms for protection, and ſo the ſovereign Power be put upon him, and he never ſeen in it: and when he had brought it, (as he thought,) to that point, when he was choſen *Conſul* alone, as never any was; yet he could make no great matter of it; becauſe thoſe, that without queſtion would have cooperated with him, underſtood him not; ſo that he was fain in the end, to go the beaten and common track of getting Arms into his hands, by colour of oppoſing himſelf againſt Cæſar: ſo tedious, caſual, and unfortunate are thoſe Counſels which are cover'd with *deep Diſſimulation*; whereof it ſeems *Tacitus* made the ſame judgement, when he makes the *Arts of Simulation*, a prudence of an inferior form, in regard of *true Policy*, attributing the one to *Auguſtus*, the other to *Tiberius*; for ſpeaking of *Livia* he ſaith thus, *That ſhe ſorted well with the Arts of her husband, and Diſſimulation of her ſon.*

Ad Att Lib. x. E. 4.

Cic. ad Attic.

Hiſt. 2.

Sal. apud Sueton. lib. de el. Gramm.

Annal. libris.

§ *As touching the bending and moulding of the Mind; it muſt indeed by all poſſible means be endeavoured, that the mind be made pliant and obedient to occaſions and opportunities, and that it be not any way ſtiff and renitent to them: for nothing hinders the effecting of Buſineſs, and the making of mens fortunes ſo much as this: Idem manebat neque idem decebat, that is, when men are where they were, and follow their own bent when occaſions are turn'd.* Therefore *Livy*, when he brings in *Cato Major*, as the experteſt Architect of his fortune, very well annexes this, that he had, *verſatile ingenium*, and thereof it comes, that theſe grave ſolemn wits, which muſt be like themſelves, and cannot make departure, have for moſt part more dignity than felicity. But in ſome it is nature to be viſcuous and inwrapt and not eaſie to turn: in others it is cuſtom, that is almoſt a nature, and a conceit, which eaſily ſteals into mens minds, which is, that men can hardly make themſelves believe, that they ought to change ſuch courſes, as they have found good and proſperous by farther experience. For *Machiavel* notes wiſely in *Fabius*

Fabius Maximus, How *he would have been temporizing ſtill according to his old biaſs, when the nature of the war was altered and required hot purſuit.* In ſome others the ſame weakneſs proceeds from want of penetration in their judgement, when men do not in time diſcern the Periods of things and Actions, but come in too late after the occaſion is eſcaped. Such an overſight as this, *Demoſthenes* reprehends in the People of Athens, ſaying, *they were like country-fellows playing in a Fence-ſchool, that if they have a blow, then they remove ther weapons to that ward and not before.* Again in others this comes to paſs, becauſe they are loth to loſe the labour, in that way, they have enter'd into, nor do they know how to make a retrait; but rather entertain a conceit, that by perſeverance they ſhall bring about occaſions to their own ply. But from what root or cauſe ſoever this viſcoſity and reſtiveneſs of mind proceeds, it is a thing moſt prejudicial both to a mans affairs and fortunes; *and nothing is more politick, than to make the wheel of our mind concentrick and voluble with the wheels of Fortune.* Thus much of the two ſummary precepts touching the *Architecture of Fortune. Precepts ſcatter'd* are many, but we will only ſelect a few to ſerve as examples to the reſt.

Diſcurs ſupra Liv.

Orat. in Philip. 1.

§ *The firſt Precept is*, that this *Architect of his own fortune rightly uſe his Rule, that is, that he inure his mind to judge of the Proportion and valure of things, as they conduce more or leſs to his own fortune and ends; and that he intend the ſame ſubſtantially, and not ſuperficially.* For it is ſtrange, but moſt true, that there are many, whoſe *Logical part of Mind* (if I may ſo term it) is good, but the *Mathematical part* nothing worth; that is, who can well and ſoundly judge of the conſequences, but very unskilfully of the prizes of things. Hence it comes to paſs, that ſome fall in love and into admiration with the private and ſecret acceſs to Princes; *others* with popular fame and applauſe, ſuppoſing they are things of great purchaſe, when in many caſes they are but matters of envy, peril, and impediment: *others* meaſure things, according to the labour and difficulty ſpent about them, thinking that if they be ever moving, they muſt needs advance and proceed; as *Cæſar* ſaid in a deſpiſing manner of *Cato Uticenſis*, when he deſcribes how laborious, aſſiduous and indefatigable he was to no great purpoſe, *Omnia* (ſaith he) *magno ſtudio agebat. Hence* likewiſe it comes to paſs, that men often abuſe themſelves, who if they uſe the favour and furtherance of ſome great and honourable Perſon, they promiſe themſelves all proſperous ſucceſs; whereas the truth is, that not the greateſt, but the apteſt inſtruments, ſooneſt, and more happily accompliſh a work. *And for* the true direction of the *Mathematical ſquare of the Mind*; it is worth the pains eſpecially to know, and have it ſet down, what ought *firſt* to be reſolved upon for the *building and advancing of a mans fortune*; what *next*, and ſo forward.

§ *In the firſt place I ſet down, the Amendment of the mind*; for by taking away and ſmoothing the impediments, and rubs of the Mind, you ſhall ſooner open a way to fortune, than by the aſſiſtance of Fortune, take away the impediments of the Mind. *In the ſecond place I ſet down wealth and Means*, which perchance moſt men would have placed firſt, becauſe of the general uſe it bears towards all variety

riety of occaſions; but that opinion I may condemn with like reaſon, as *Machiavel* in another caſe not much unlike; for whereas the old ſaying was, that *Monies were the ſinews of war*, he on the contrary affirmed, *that there were no other ſinews of wars, ſave the ſinews of valiant mens arms.* In like manner it may be truly affirmed, *that it is not Monies that is the ſinews of Fortune*, but the ſinews rather and abilities of the Mind, Wit, Courage, Audacity, Reſolution, Moderation, Induſtry, and the like. *In the third place, I ſet down Fame and Reputation*, and the rather becauſe they have certain tides and times, which if you do not take in their due ſeaſon, are ſeldom recovered; *it being a very hard matter to play an after-game of Reputation. In the laſt place I ſet down Honours*, to which certainly there is a more eaſie acceſs made by any of the other three, much more by all united; than if you begin with *Honours* and ſo proceed to the reſt. But as it is of ſpecial conſequence, to obſerve the order and priority of *things*; ſo is it of leſs import, to obſerve the order and priority of *Time*; the prepoſterous placing whereof, is one of the commoneſt errors; while men fly unto their ends, when they ſhould intend their beginnings; and whilſt we ſuddenly ſeize upon the higheſt matters, we raſhly paſs over what lies in the midſt; but it is a good precept, *Quod nunc inſtat agamus.*

The ſecond precept is, that upon a greatneſs and Confidence of Mind, we do not engage our forces in too arduous matters, which we cannot ſo well conquer; nor that we row againſt the ſtream. For as touching mens Fortune, the counſel is excellent,

——*Fatis accede Deiſque.*

Let us look about us on every ſide, and obſerve where things are open, where ſhut and obſtructed; where eaſie, where difficile, to be compaſſed; and that we do not overſtrain and miſemploy our ſtrength where the way is not paſſible, for this will preſerve us from foil; not occupy us too much about one matter; we ſhall win an opinion of Moderation; offend few; and laſtly, make a ſhew of a perpetual felicity in all we undertake; whilſt thoſe things which peradventure would of their own accord have come to paſs, ſhall be attributed to our providence and induſtry.

The third Precept may ſeem to have ſome repugnancy with that former immediately going before; though if it be well underſtood, there is none at all. *The Precept is this; that we do not always expect occaſions, but ſometimes provoke them, and lead the way unto them*; which is that which *Demoſthenes* intimates in high terms. *For as it is a received principle that a General ſhould lead the Army; ſo wiſe and underſtanding men ſhould conduct and command matters, and ſuch things ſhould be done as they ſaw fit to be done; and that they ſhould not be forc'd to purſue and build only upon events.* For if we diligently conſider it, we ſhall obſerve *two* differing kinds of ſufficiency in managing affairs and handling buſineſs; for ſome can make uſe of occaſions aptly and dexterouſly, but plot and excogitate nothing; ſome are all for Plots, which they can well urge and purſue, but cannot accommo-

Orat. in Phil. 1.

date

date and take in: Either of which abilities is maimed, and imperfect without the other.

A fourth Precept is, not to embrace any matters which do occupy too great a quantity of time; but to have that verse ever sounding in our ears,

Sed fugit interea, fugit irreparabile tempus.

And the cause why those who addict themselves to professions of burden and the like, as Lawyers, Orators, painful Divines, writers of Books, and the like, are not commonly so politick in contriving and promoting their own fortunes, is no other than this; that they want time, which is otherwise imployed, to inform themselves of Particulars; and to wait upon occasions, and to devise and project designs which may conduce to the making of their fortune. Nay farther, in the Courts of Princes and in States, you shall have those that are exceeding powerful and expert how to advance their own Fortune, and to invade the Fortune of others, which undergo no publick charge, but are continually practised in that whereof we speak, *The Advancement of Life.*

A Fifth Precept is, to imitate nature which doth nothing in vain. Which certainly we may do, if we discreetly mingle and interlace our businesses of all sorts. For the mind should in every particular action be so disposed and prepared; and our intentions so subdued and subordinated one under another; as if we cannot have that we seek in the best degree, yet we may have it in a second, or at least in a third: but if we can get no footing nor any consistency at all in any part of a thing we desire; then we may turn the pains we have taken upon some other end, than that whereto it was designed: but if we cannot make any thing of it for the present, at least we may extract something out of it that may stand us in stead for the time to come; but if we can derive no solid effect or substance from it, neither for the present nor for the future; let us yet endeavour to win some good opinion and reputation by it; and the like: ever exacting accounts of our selves, whereby it may appear that we have reapt somewhat more or less from every particular Action and Counsel; never suffering our selves to be cast down and dispirited, like men amaz'd and confused, if perchance we fail in the principal scope of our intentions. For nothing is more prejudicious to a Politick, than to be wholly and solely taken up with one thing; for he that doth so, loseth infinite occasions which do intervene upon the by; and which perhaps are more proper and propitious for somewhat may be of use hereafter; than for those things we urge for the present: and therefore we must be perfect in that Rule, *Hæc oportet facere & illa non omittere.* Epict. Ench.

A sixth Precept is, that we engage not our selves too peremptorily in any thing though it seem not at first sight, liable to accident; but that we ever have either an open window to fly out at, or a secret postern-way to retire by.

A seventh Precept is, that ancient Rule of *Bias*; so it be construed not to any point of Perfidiousness; but to caution and moderation.

So love a man as yet thou maiſt become an enemy, ſo hate a man as yet thou maiſt become his Friend; for it utterly betrays and fruſtrates all utility, for a man to embark himſelf too far in unfortunate friendſhips, unquiet and troubleſome ſpleens, or childiſh and humorous Æmulations.

Plura velis? V. Cardani Proxen ſive Arcana Pol. ô quam Arcana!

Theſe ſhall ſuffice for examples touching the knowledge *of the Advancement of Life:* yet I would have it remembred, that theſe adumbrations which we have drawn and ſet down as *Deficients*, are far from compleat Tractates of them, but only that they are as little pieces and edgings for patterns, whereby a judgement may be made of the whole web. Again we are not ſo weak and fooliſh as to avouch that *Fortunes* are not to be obtained without all this ado; for we know well they come tumbling into ſome mens laps, and a number obtain good *fortunes* only with diligence and aſſiduity (with ſome little caution intermingled) in a plain way, without any great or painful Art. But as *Cicero*, when he ſets down the Idea of a perfect Orator, doth not mean that every Pleader ſhould be or can be ſuch: and again as in the deſcription of a Prince or a Courtier, by ſuch as have handled thoſe ſubjects; the Mould is made according to the perfection of the Art, and not according to common practice: the ſame we have performed in the inſtruction of a *Politick* man; I mean *Politick for his own Fortune.* And likewiſe take this advertiſement along with you, That the Precepts which we have choſen and ſet down, are all of that kind which may be counted and called *Bonæ Artes.* As for *Evil Arts*, if a man would yield himſelf a diſciple to *Machiavel* who gives it in precept, *That a man needs not much care for vertue it ſelf, but for the appearance only thereof in the eyes of the world, becauſe the fame and credit of vertue, is a help, but the uſe of it a cumber*; who in another place gives this rule: That a Politick man lay this as a foundation of his practick wiſdom, *that he preſuppoſe, that men are not rightly and ſafely to be wrought upon and bowed to the bent of our wills, otherwiſe than by fear; and therefore let him endeavour by all means poſſible to have every man obnoxious, low and in ſtreights.* So as Machiavel's Politician ſeems to be what the Italians call *il ſeminatore délle ſpine*; or if any would embrace that Principle which *Cicero* cites, *Cadant amici, dummodo inimici intercidant*; as the *Triumviri* ſold the lives of their friends, for the deaths of their enemies. Or if a man would be an imitator of *L. Catilina* to become an incendiary and a perturber of ſtates, to the end he may better fiſh in droumy waters, and unwrap his fortunes; *I* (ſaith he) *if once a fire ſeize upon my Fortune, will extinguiſh it not with water but with ruine*; or if any one would convert to his uſe that of *Lyſander*, who was wont to ſay, *That children are to be deceived with Comfits, and men with Oaths.* With other ſuch corrupt and pernicious Poſitions of the ſame impreſſion, whereof (as in all other things,) there are more in number, than of the good and ſound. If any (I ſay) be delighted with ſuch contagious and polluted wiſdom, I deny not but with theſe diſpenſations from all the laws of charity and integrity, wholly enſlaved to the preſſing of his own *Fortunes*, he may be more ſpeedy and compendious *in the promoting of his Fortune:* but it is in life, as it is in ways, the ſhorteſt way is commonly the foulеſt; and ſurely the fairer way is not much about.

Libro del Pren.

Cic. pro L. Muræna.

Plutar. in Lyſand.

about. *But it is ſo* far from the mind and purpoſe of this Diſcourſe that men ſhould apply themſelves to theſe corrupt and crooked Arts, that rather indeed (if they be in their own power, and are able to bear and ſuſtain themſelves, and be not carried away with the whirlwind and tempeſt of Ambition) they ought in the purſuit of Fortune to ſet before their eyes, not only that general Map of the world, *That all things are vanity and vexation of ſpirit*; but alſo that more particular card and direction, *That Being, without well-Being, is a curſe, and the greater Being, the greater curſe*; and that all vertue is moſt rewarded, and all wickedneſs moſt puniſht in it ſelf: according as the Poet ſaith excellently,

Quæ vobis, quæ digna, viri, pro talibus auſis
Præmia poſſe reor ſolvi? Pulcherrima primùm
Dii Moreſq; dabunt veſtri.—— Virg. Æn. 9.

And ſo on the contrary he ſpeaks as truly of the wicked— *atq; eum ulciſcentur mores ſui ——* Nay further, the race of Mortality, whilſt their working heads every way toſs and diffuſe their thoughts how they may beſt fore-caſt and conſult *their advancement in the world*, ought, in the midſt of theſe heats, and eager purſuits, to look up to the Divine Judgement, and the Eternal Providence, which oftentimes ſubverts and brings to nothing the plots of the wicked, and their evil counſels, though never ſo profound; according to that of ſacred Scripture, *He conceived wicked thoughts, travel'd great with miſchief, and ſhall bring forth deluſive vanity.* Nay, though men ſhould refrain themſelves from injuries and evil arts; *yet this inceſſant and Sabbathleſs aſpiring to the ſteep height of Fortune, pays not the tribute of our time due unto God, who (as we may ſee) demands and ſets apart for himſelf a Tenth of our ſubſtance, and a Seventh of our time.* For it is to ſmall purpoſe to have an erected face towards heaven, and a groveling ſpirit upon earth, eating duſt as doth the ſerpent; an oppoſition which even Heathens could ſee and cenſure. Pſal. vii.

Atq; affigit humo divinæ particulam Auræ. Horat. ſer. 2.

And if any man ſhould herein flatter himſelf, that he reſolves to imploy his Fortune well, though he ſhould obtain it ill; as was wont to be ſaid of *Auguſtus Cæſar* and *Septimius Severus*, *That either they ſhould never have been born, or elſe they ſhould never have dyed*, they did ſo much miſchief in the purſuit and aſcent of their greatneſs; and ſo much good, when they were eſtabliſh'd; let him take this with him, that ſuch compenſation of evil by good, may be allowed after the Fact, but is deſervedly condemn'd in the purpoſe. *Laſtly*, it will not be amiſs for us, in that ſwift and hot race towards our fortune, to cool our ſelves a little, with that elegant conceit of the Emperour *Charls* the Fifth, in his inſtructions to his Son, *That Fortune hath ſomewhat of the nature of a woman, that if ſhe be too much wooed, ſhe is the farther off:* but this laſt remedy is for thoſe whoſe taſte, from ſome diſtemper of the mind, is corrupted: let men rather build upon that foundation, which is as a corner-ſtone of Divinity and Philoſophy Script. Germ. A.C. 1519.

losophy, wherein they almost joyn close by the same assertion of *what should be first sought*; for *Divinty* commands, *First seek the Kingdom of God, and all these things shall be superadded unto you*; and *Philosophy* commands somewhat like this; *Seek first the goods of the mind, and the rest shall be supplied, or no way prejudiced by their absence.* And although this foundation laid by man, is sometimes placed upon the sands, as we may see in *M. Brutus*, who in the last scene of his life, brake forth into that speech,

Mat. VI.

Te Colui virtus ut Rem, ast Tu Nomen inane es:

Dion. Lib. XLVII. ex Poeta vet.

Yet the same foundation laid by the hand of heaven, is firmly settled upon a Rock. *And here* we conclude the knowledge of *Advancement of Life*; and withall the general knowledge of *Negotiations.*

CHAP. III.

The Partitions *of the Art of Empire or Government* are omitted; only access is made to two *Deficients.* I. *The knowledge of enlarging the* Bounds of Empire. II. *And the knowledge of* universal Justice; *or of the Fountains of Law.*

I. I Come now to the *Art of Empire*, or the *the knowledge of Civil Government*; under which *House-hold Government* is comprehended, as a *Family* is under a *City.* "In this part, as I said before, I "have commanded my self silence: yet notwithstanding I may not "so disable my self; but that I could discourse of this part also, per-"chance not impertinently, nor unprofitably; as one practised by "long experience; and by *your Majesty's* most indulgent favours, and "no merit of mine own, raised by the degrees of office and honours, "to the highest Dignity in the State; and have born that office for "four years; and which is more, have been accustomed to *your* "*Majesties* commands and conferences, for the continued space of "eighteen years together, (which even of the dullest mould might "fashion and produce a State-man) who have spent much time, a-"mongst other knowledges, in Histories and Laws. *All which I report to Posterity, not out of any arrogant ostentation; but because I presume it makes something to the honour and dignity of Learning; that a man born for Letters more than any thing else, and forcibly carried away, I know not by what fate, against the bent of his own Genius, to a Civil active course of life, should yet be advanc'd to so high and honourable charges in the State, and that under so wise a King.* But if my times of leisure shall bring forth hereafter any thing touching the *wisdom of Government*, and state-matters, it will be perchance an Abortive, or an After-birth. In the mean space, now that all Sciences are distributed and ranged, as it were, into their true Forms, lest such

such an eminent place as this should remain empty, I have judg'd it fit to note as *Deficients* two Portions only of *Civil Knowledge*, which pertain, not to the *Secrets of Empire*, but are of a more open and publick nature; and, according to our custom, to propound examples thereof. *Seeing the Arts of Government*, comprehend three sorts of *Politick Duties: First*, that a Kingdom or State be conserved: *Secondly*, that it may become happy and flourishing: *Thirdly*, that it may be amplified, and the bounds thereof propagated and extended. Of these duties the *two first* are, for the most, by many, excellently well handled; but the *third* is past over in silence; wherefore we will set this down in the number of *Deficients*, and according to our manner propose examples thereof; calling this part of Civil Knowledge *Consulem Paludatum*, or a *knowledge of the enlarging the Bounds of Empire.*

EXAMPLE

*

CONSUL PALUDATUS, sive de proferendis Imperii finibus.

Of a Summary Treatise touching the enlarging of the Bounds *of Empire.*

THe speech of *Themistocles*, taken to himself, was indeed somewhat uncivil and haughty; but if it had been applied to others, and at large, certainly it may seem to comprehend in it a wise observation, and a grave censure. Desired at a Feast to touch a Lute, he said, *He could not Fidle, but yet he could make a small Town a great City:* These words drawn to a Politick sence, do excellently express and distinguish two differing Abilities, in those that deal in business of Estate. *For if a* true survey be taken of all Counsellors and States-men that ever were, and others promoted to publick charge, there will be found (though very rarely) those which can make a *small State great, and yet cannot fidle*; as on the other side there will be found a great many, *that are very cunning upon the Cittern or Lute, (that is in Court-Trifles) but yet are so far from being able to make a small State, great; as their gift lies another way, to bring a great and flourishing Estate to ruine and decay.* And certainly those degenerate Arts and Shifts, whereby many Counsellors and Governours gain both favour with their Masters, and estimation with the vulgar, deserve no better name than *Fidling*; being things rather pleasing for the time, and graceful to the Professors themselves; than tending to the *weal and advancement of the State*, which they serve. There are also (no doubt) *Counsellors* and *Governours*, not to be despised, which may be held sufficient men, and equal to their charge; able to manage Affairs, and to *keep them from precipices, and manifest inconveniencies*, which nevertheless are far from the Ability *to raise and amplifie an Estate.* But be the work-men what they may be, let us cast our eyes upon the work, that is, *what is the true greatness of Kingdoms and States, and by what means it may be obtained?* An argument fit for great Princes to have perpetually in their hand, and diligently to meditate; to the end that neither by overmeasuring their Forces, they

Plutar. in Them.

they loſe themſelves in vain, and too difficile enterpriſes; nor on the other ſide undervaluing them, they diſcend to fearful and puſillanimous Counſels. *The Greatneſs of an Eſtate in Bulk and Territory, doth fall under meaſure; the Greatneſs of Financies and Revenue doth fall under computation.* The number of Citizens and the Pole may be taken by Muſters; and the multitude and greatneſs of Cities and Towns, by Cards and Mapps. But yet there is not any thing amongſt Civil Affairs, more ſubject to error, than a true and intrenſick valuation, concerning the Power and Forces of an Eſtate. *The Kingdom of Heaven is compar'd not to an* Acorn or Nut; *but to a* Grain of Muſtard-ſeed, *which is one of the leaſt Grains, but hath in it a property and ſpirit haſtily to get up and ſpread.* So are there *Kingdoms and States* in compaſs and territory very great, and yet not ſo apt to *enlarge their Bounds or Command*; and ſome on the other ſide that have but a ſmall dimenſion of ſtemm, and yet apt to be the Foundations of great Monarchies.

I. *Walled Towns*, ſtored Arcenals and Armories, goodly Races of Horſe, Chariots of war, Elephants, Ordinance, Artillery, and the like; *all this is but a ſheep in a Lions skin, except the Breed and Diſpoſition of the people be ſtout and war-like.* Nay, number it ſelf in Armies imports not much, where the people is of a faint and weak courage: for, as *Virgil* ſaith, *It never troubles a Wolf, how many the ſheep be.* The Army of the Perſians in the Plains of *Arbela*, was ſuch a vaſt ſea of people, as it did ſomewhat aſtoniſh the *Commanders in Alexander's Army*; who came to him therefore, and wiſht him to ſet upon them by *Night*, but he anſwered, *I will not Pilfer the victory*; and the Defeat by that couragious aſſurance was the more eaſie. When *Tigranes* the *Armenian*, being encamped upon a hill with an Army of 400000 Men, diſcovered the Army of the *Romans* being not above 14000 marching towards him, he made himſelf merry with it, and ſaid; *yonder men are too many for an Ambaſſage, and too few for a Fight:* but before the ſun ſet he found them enow to give him the chaſe with infinite ſlaughter. Many are the examples of the great odds between number and courage. *Firſt* then a man may rightly make a judgement and ſet it down for a ſure and certain truth, That the principal point of all other which reſpects the *Greatneſs of any Kingdom or State, is to have a Race of Military men.* And that is a more trite than true ſaying, *That Money is the Sinews of War*, where the ſinews of mens arms in baſe and effeminate people are failing: for *Solon* ſaid well to *Cræſus* (when in oſtentation he ſhewed him his gold) *Sir, if any other come that hath any better Iron than you, he will be maſter of all this Gold.* Therefore let any *Prince* or *State* think ſoberly of their Forces, except their *Militia* of Natives be of Good and Valiant Souldiers: and let Princes on the other ſide that have Subjects of ſtout and martial diſpoſition, know their own ſtrength, unleſs they be otherwiſe wanting to themſelves. As for Mercenary Forces (which is the help in this caſe where native forces fail) all times are full of examples, whereby it manifeſtly appears, that whatſoever State or Prince doth reſt upon them, *he may ſpread his Feathers for a time beyond the compaſs of his neſt; but he will mew them ſoon after.*

B. Ecl 7.

Plutar in Alex.

Plut. in Lucul.

Mach. Diſcorſ. ſopra Livio lib. 2.

Plut. in Solone.

2. *The*

2 *The blessing of Judah* and *Issachar* will never meet. *That the same Tribe or Nation should be both the Lions whelp, and the Ass between Burdens*; neither will it be *that a people overlaid with Taxes, should ever become Valiant, and Martial.* It is true that *Taxes* levied by publick consent of the estate do depress and abate mens courage less; as a man may plainly see in the Tributes of the Low-countries, which they call *Excises*; and in some degree in those contributions which they call *Subsidies* in England. For you must note that we speak now of the Heart and not of the Purse; so that although the same Tribute conferr'd by consent or imposed by command, be all one to the purse, yet it works diversly upon the courage: Therefore set down this too as a Principle, *That no People overcharg'd with Tribute, is fit for Empire.* Gen. XLIX.

3 *Let states* and *kingdoms* that aim at *Greatness* by all means take heed how the *Nobility*, and *Grandees*, and that those which we call *Gentle-men*, multiply too fast; for that makes the common subject grow to be a Peasant and Base swain driven out of heart, and in effect nothing else but the Noble mans Bond-slaves and Labourers. Even as you may see in Coppice-wood, *If you leave your studdles too thick, you shall never have clean underwood, but shrubs and bushes:* So in a countrey, if the *Nobility* be too many, the *Commons* will be base and heartless, and you will bring it to that, that not the hundredth Pole will be fit for an Helmet; especially as to the *Infantry*, which is the nerve of an Army; and so there will be great Population and little strength. This which I speak of, hath been in no Nation more clearly confirm'd than in the examples of *England* and *France*, whereof *England*, though far inferiour in Territory and Population, hath been nevertheless always an overmatch in Arms; in regard the middle-people of *England* make good Souldiers, which the Peasants of *France* do not. And herein the device of *Henry the Seventh King of England* (whereof I have spoken largely in the History of his life) was profound and admirable, in making Farms and Houses of Husbandry of a standard; that is, maintain'd with such a Proportion of land unto them, as may breed a subject to live in convenient plenty, and to keep the Plough in the hands of the Owners, or at least usu-fructuary, and not hirelings and Mercenaries; and thus a Countrey shall merit that Character whereby *Virgil* expresses ancient *Italy*, Histor. Hen. VII.

Terra potens Armis, atque ubere Glebâ. Æn. 1.

Neither is that state which is almost peculiar to *England*, (and for any thing I know, hardly to be found any where else, except it be perhaps in *Poland*) to be passed over; I mean the state of Free-servants and Attendants upon Noble men and Gentle-men; of which sort, even they of inferiour condition, do no ways yield unto the *Yeomanry*, for *Infantry*. And therefore out of all question the Magnificence and that Hospitable splendor, the Houshold servants, and great Retinues of Noble men and Gentle-men, receiv'd into custom in *England*, doth much conduce unto *Martial Greatness:* whereas on the other side, the close, reserved and contracted living of Noble men, causeth a Penury of *Military Forces*.

4 *By all means it is to be procured, that the Trunk of Nebuchadnezzar's Tree of Monarchy, be great enough to bear the Branches and the Boughs*; that is, that the number of *Natural Subjects* to the Crown or State, bear a ſufficient proportion for the over-toppiug the *ſtronger Subjects*. Therefore all States that are liberal of *Naturalization* towards *ſtrangers*, are fit for the *Greatneſs of Empire*. For it is a vain opinion to think that a handful of people, can with the greateſt courage and Policy in the world, keep and repreſs under the laws of Empire, too large and ſpacious extent of *Dominion*; this may hold for a time, but it will fail ſuddenly. The *Spartans* were a ſparing and nice People in point of *Naturalization*, whereby while they kept their compaſs, they ſtood firm and aſſured; but when they began to ſpread and enlarge their Dominion, and that their boughs, multiplied by ſtrangers, were becoming too great for the ſtemm of the *Spartans*, they became a windfal upon the ſudden. Never any State was in this point ſo open to receive ſtrangers into their Body, as were the Romans; therefore their Fortune ſeconded their wiſe inſtitution, for they grew to the greateſt Monarchy in the world. Their manner was to grant *Naturalization* (which they called *Jus Civitatis*) and to grant it in the higheſt degree; that is, not only *Jus Commercii*, *Jus Connubii*, *Jus Hæreditatis*; but alſo *Jus Suffragii*, and *Jus Petitionis ſive Honorum*; and this not to ſingular perſons alone, but likewiſe to whole families, yea to Cities, and ſometimes to whole Nations. Add to this, their cuſtom of *Plantation of Colonies*, whereby the *Roman Plants* were removed into the ſoil of other Nations: and putting both conſtitutions together, you will ſay, *that it was not the Romans that ſpread upon the world; but it was the world that ſpread upon the Romans*; which was the ſecureſt way of *Enlarging the Bounds of Empire*. I have marvelled ſometimes at *Spain*, how they claſp and govern ſo large Dominions, with ſo few natural *Spaniards*: but ſurely the whole compaſs of Spain, is a very great body of a Tree; being it contains far more ample Territories, than *Rome* or *Sparta* at their firſt riſings. And beſides, though the Spaniards have not had that uſage to *Naturalize* liberally; yet they have that which is next to it, that is, *To employ, almoſt indifferently, all Nations in their Militia of Ordinary ſouldiers*; yea and ſometimes they confer their higheſt commands of war, upon Captains that are no natural Spaniards: nay it ſeems, not long ago, they have begun to grow ſenſible of this want of Natives, and to ſeek a Remedy, as appears by the *Pragmatical Sanction* publiſht this year.

Exempla apud Cic. pro L. C Bal.

5 *It is moſt Certain that ſedentary and within door Mechanical Arts; and Delicate Manufactures* (that require rather the Finger, than the Arm,) *have in their nature a contrariety to a military Diſpoſition*. And generally all warlike People are a little idle; and love danger better than travail: neither muſt they be too much Broken of it, if we will have their ſpirits preſerv'd in vigor. Therefore it was great advantage in the ancient ſtates of *Sparta*, *Athens*, *Rome*, and others, that they had the uſe, not of *Free-men*, but of *Slaves*, which commonly did rid thoſe *Manufactures*: but the uſe of *Slaves* ſince the receiving of the *Chriſtian Law*, is, in greateſt part aboliſht. That which comes neereſt to this cuſtom, is to leave thoſe Arts chiefly to ſtrangers, which

which for that purpoſe are to be allured, or at leaſt the more eaſily to be received. The *vulgar Natives* ſhould conſiſt of three ſorts of men; that is, of *Tillers of Ground*; *Free-ſervants*; and *Handy-crafts-men* of ſtrong and *Manly Arts*, as Smiths, Maſons, Carpenters, *&c.* not reckoning profeſſed Souldiers,

6 *But above all, for the Greatneſs of Empire*, it imports moſt; *that a Nation do profeſs Arms as their glory*, Principal ſtudy, and chiefeſt Honour. For the things which we formerly have ſpoken of, are but *Habilitations* towards Arms; and to what purpoſe is *Habilitation* without endeavour to produce it into *Act*? *Romulus*, *after his death*, (as they report or feign) *ſent a preſent to the* Romans, *that above all they ſhould intend* Arms, *and then they ſhould prove the greateſt* Empire *of the World*. The whole Fabrick of the *State of Sparta*, was, induſtriouſly (though not ſo wiſely) compos'd and built to that ſcope and end. The *Perſians* and *Macedonians* had the ſame uſage, but not ſo conſtant and laſting. The *Britans*, *Galls*, *Germans*, *Goths*, *Saxons*, *Normans*, (for a flaſh of time) gave themſelves chiefly to *Arms*. The *Turks* not a little inſtigated thereto by their Law, retain the ſame *diſcipline* at this day, (though as it is now practiſed) with great declination of their *Militia*. Of Chriſtian *Europe* they that retain and profeſs it, are in effect only the *Spaniards*. But it is ſo liquid and manifeſt, *that every man profiteth moſt, in that he moſt intendeth*, that it needs not to be ſtood upon. It is enough to point at it; *That no Nation which doth not profeſs Arms, and practiſe Military Arts, making it their principal ſtudy and occupation, may ever hope to have any notable greatneſs of Empire, fall into their mouths*: and on the other ſide, it is a moſt certain Oracle of time, *That thoſe Nations that have continued long in the profeſſion and ſtudy of Arms (as the Romans and Turks principally have done, for the propagation of Empire,) work wonders*. Nay thoſe that have flouriſht for the glory of Arms, but for the ſpace only of one age; have commonly attain'd *that Greatneſs of Dominion*, in that one age, which maintained them long after, when their profeſſion and exerciſe of Arms hath grown to decay.

Liv. lib. 1. v. c 37.

7 *Incident to this Precept is; for a ſtate to have ſuch laws and cuſtoms which may readily reach forth unto them juſt occaſions, or at leaſt pretences of taking Arms*. For there is that apprehenſion of Juſtice imprinted in the nature of men, that they enter not upon *wars* (whereof ſo many calamities do enſue) but upon ſome, at the leaſt ſpecious grounds and Quarrels. The Turk hath at hand for cauſe of war the Propagation of his law and ſect; a quarrel that he may always command. The *Romans* though they eſteemed the *extending of the Limits of their Empire*, to be great honour to their Generals, when it was done; yet for that cauſe alone, to *Propagate their bounds*, they never undertook a war. Therefore let a nation that pretends to *Greatneſs*, and aſpires to *Empire*, have this condition, that they have a quick and lively ſenſe of any wrongs either upon Borderers, Merchants, or publick Miniſters; and that they ſit not too long upon the firſt provocation. *Again*, Let them be preſt, and Active to ſend Aids and Succours to their Allies and confederates; as it ever was with the *Romans*: inſomuch

as if a hoſtile invaſion were made upon a confederate, which alſo had leagues Defenſive with other ſtates, and the ſame implored their ayds ſeverally; the Romans would ever be the formoſt; and leave it to no other to have the Honour of the Aſſiſtance. *As for* the wars which were anciently made for a kind of conformity, or tacite correſpondency of Eſtates, I do not ſee upon what Law they are grounded. Such were the wars undertaken by the Romans, for the liberty of *Grecia*: ſuch were thoſe of the *Lacedemonians* and *Athenians*, to ſet up or pull down *Democracies* and *Oligarchies*: ſuch are the wars made ſometimes by States, and Princes, under pretence of protecting Forreign ſubjects, and freeing them from Tyranny and oppreſſion, and the like. Let it ſuffice for the preſent point that it be concluded, *That no eſtate expect to be Great, that is not inſtantly awake, upon any juſt occaſion of Arming.*

8 *No body can be healthful without exerciſe, neither Natural Body nor Politick: and certainly to a Kingdom or Eſtate a juſt and honourable war is in place of a wholſome exerciſe.* A Civil war indeed, *is like the heat of a Fever*; but a Forreign *is like the heat of Exerciſe*, and ſerves to keep the body in health: for in a ſloathful and drowſle Peace, both courages will effeminate, and Manners corrupt But howſoever it be for the *Happineſs* of any *Eſtate*, without all queſtion, for *Greatneſs*, it maketh, to be ſtill for the moſt part in Arms: and a *veteran* Army (though it be a chargeable Buſineſs) always on foot, is that which commonly gives the Law, or at leaſt the Reputation amongſt all *neighbour-ſtates*. This is notably to be ſeen in *Spain*, which had in one part or other a *veterane Army* almoſt continually, now by the ſpace of ſix-ſcore years.

9 *To be Maſter of the Sea, is an Abridgement of a Monarchy*, *Cicero* writing to *Atticus* of *Pompeius* his preparation againſt *Cæſar*, ſaith; *Conſilium Pompeii, planè Themiſtocleum eſt; putat enim, qui mari Potitur, eum Rerum potiri.* And without doubt *Pompey* had tyred out and broken *Cæſar*, if upon a vain confidence he had not left that way. We ſee from many examples the great effects of *Battels by Sea*: The Battel of *Actium* decided the Empire of the world: the Battel of *Lepanto* put a ring in the noſe of the Turk: *Certainly* it hath often fallen out that *Sea-fights* have been final to the war; but this is when Princes or States have ſet up their Reſt upon thoſe Battels. Thus much is without all doubt, *that he that commands the Sea, is at great liberty; and may take as much and as little of the war as he will: whereas on the Contrary, thoſe that be ſtrongeſt by* Land, *are many times never-theleſs in great ſtraits.* But at this day and with us of *Europe*, the vantage *of ſtrength at Sea (which is indeed one of the principal Dowries of this Kingdom of Great Brittain)* is in the ſum of Affairs of great import: both becauſe moſt of the Kindoms of *Europe*, are not merely Inland, but girt with the Sea moſt part of their compaſs, and becauſe the Treaſures and Wealth of both Indies, ſeems in great part but an Acceſſary to the *command of the Seas.*

10. *The wars of latter Ages seem to be made in the dark, in respect of the Glory and Honour which reflected upon Military men from the wars in ancient times.* We have now perchance, for Martial encouragement, some degrees and orders of Chivalry, which nevertheless are conferred promiscuously upon Soldiers, and no Soldiers; and some Pedegrees of Families perhaps upon Scutchions; and some publick Hospitals for emerited and maim'd Soldiers, and such like things. But in ancient times, the *Trophy* erected upon the place of the Victory; the Funeral Laudatives and stately Monuments for those that died in the Wars; Civick Crowns, and Military Garlands awarded to particular persons; the stile of Emperor, which the greatest Kings of the World after, borrowed from Commanders in War; the solemn Triumphs of the Generals upon their return, after the Wars were prosperously ended; the great Donatives and Largesses upon the disbanding of the Armies: these, I say, were matters so many and great, and of such glorious lustre and blaze in eyes of the world, as were able to create a Fire in the most frozen breasts, and to inflame them to War. *But above all*, that of the *Triumph* amongst the Romans, was not a matter of mere pomp, or some vain spectacle or pageants; but one of the wisest and noblest institutions that ever was: for it contain'd in it three things, *Honor and Glory to the Generals*; *Riches to the Treasury out of the Spoils*; and *Donatives to the Army*. But the *Honours of Triumph* perhaps were not fit for Monarchies, except it be in the person of the King himself, or of the Kings Sons; as it came to pass in the times of the *Roman Emperors*, who did impropriate the *Honor of Triumph* to themselves and their Sons; for such Wars as they did atchieve in Person, and left only by way of indulgence, *Garments* and *Triumphal* Ensigns to the Generals.

§ *But* to conclude these discourses, (*There is no man* (as sacred Scripture testifies) *that by-care taking can add a cubit to his stature*, in this little Model of Man's body; but in the great Frame of *Kingdoms* and *Comwon-wealths*, it is in the Power of Princes and Estates, to add Amplitude and Greatness to their *Kingdoms*. For by introducing such ordinances, constitutions and customs, as we have now propounded, and others of like nature with these, they may sow *greatness* to Posterity and Future Ages. But these counsels are seldom taken into consideration by Princes; but the Matter is commonly left to fortune to take its chance. Mat. vi.

§ *And thus much* for the points that, for the present, have offered themselves to our consideration touching *the Enlarging of the Limits of a State or Kingdom*. But to what end is this comtemplation, seeing of all Imperial Soveraignties in this World, the Roman Monarchy (as it is believed) was to be the last? but that, being true to our own Design, nor any where declining out of the way (in as much as *the Amplification of a Kingdom* was, amongst the three Politick Duties, the third) we could not altogether pass it over untoucht. *There remains* now another *Deficient* of the two we have set down, that is, *of Universal Justice, or the Fountains of Law*.

11. All they which have written of Laws, have handled that Argument either as Philoſophers, or as Lawyers, and none as Statesmen. *As for Philoſophers*, they propound many things goodly for diſcourſe, but remote from uſe. *For the Lawyers*, they are mancipated and wholly devoted every one to the Laws of the State where they live, or to the Placits of the *Emperial or Pontifical Laws*, and cannot uſe impartial and ſincere judgement; but diſcourſe as out of Gives and Fetters. *Certainly* this kind of knowledge pertains properly to *States-men*; who can beſt diſcern what humane ſociety is capable of; what makes for the weal of the publick; what natural equity is; what the law of Nations, the cuſtom of Countries, the divers and different forms of States and Republicks; and therefore are able to diſcern and judge of Laws, from the Principles, both of natural Equity and Policy. *Wherefore* the buſineſs in hand is, to have recourſe unto, and make enquiry of the *Fountains* of *Juſtice*, and of *Publick utility*, and in every part of Law to repreſent a *kind of Character and Idea of that which is juſt*; by which general mark and direction he that ſhall intend his mind and ſtudies that way, may try and examine the *ſeveral laws of particular Kingdoms and Eſtates*; and from thence endeavour an emendation. *Wherefore* after our accuſtom'd manner we will, in *one Title* propound an example thereof.

EXAMPLE

* IDEA JUSTITIÆ UNIVERSALIS ſive de Fontibus Juris.

Of a Treatiſe touching *Univerſal Juſtice*, or the *Fountains of Law* in one Title by way of *Aphoriſm*.

THE PROEM.

APHORISM I.

IN Civil ſociety either *Law* or *Power* prevails; for there is a *Power* which pretends *Law*, and ſome Law taſtes rather of *Might* than *Right*. Wherefore there is a threefold *Fountain of Injuſtice*; Mere *Power*; Cunning *Illaqueation* under colour of Law; and the *Harſhneſs of Law it ſelf*.

APHORISM II.

The force and efficacy of *Private Right* is this. He that doth a wrong, by the *Fact*, receives *Profit* or *Pleaſure*; by the *Example*, incurs *Prejudice* and *Peril*: others are not Partners with him in his *Profit* or *Pleaſure*; but they take themſelves interreſſed in the *Example*; and therefore eaſily combine and accord together, to ſecure themſelves by Laws, leſt injuries by turns ſeiſe upon every particular. But if thorough the corrupt humour of the times, and the generality of guilt, it fall out, that to the greater number and the more Potent, danger is rather created than avoided, by ſuch a *Law*; Faction diſanuls that *Law*, which often comes to paſs.

APHO-

APHORISM III.

Private Right is under the Protection of *Publick Law*: for *Laws are for the People*; *Magistrates for Laws*; and the authority of Magistrates depends upon the Majesty of Empire, and the form of Policy; and upon Laws Fundamental: wherefore if this Part be sound and healthful, Laws will be to good purpose; if otherwise, there will be little security in them.

APHORISM IV.

Yet notwithstanding, the end of *Publick Law* is not only to be a Guardian to *Private Right*, lest that should any way be violated; or to repress Injuries: but it is extended also unto Religion, and Arms and Discipline, and Ornaments, and Wealth, and finally to all things which any way conduce unto the prosperous Estate of a Commonwealth.

APHORISM V.

For the End and Aim at which *Laws* should level, and whereto they should direct their Decrees and Sanctions, is no other than this *That the People may live happily*: This will be brought to pass, if they be rightly train'd up in *Piety* and *Religion*, if they be *Honest* for Moral conversation; *secur'd by Arms* against foreign enemies; *munited by Laws*, against seditions, and private wrongs; *Obedient* to Government and Magistrates; *Rich and flourishing* in Forces and wealth: but the Instruments and sinews of all Blessings are *Laws*.

APHORISM VI.

And this end the best *Laws* attain; but many Laws miss this mark: for there is a great difference, and a wide distance in the comparative value and virtue of *Laws*; for *some Laws* are excellent, *some* of a middle temper; *others* altogether corrupt. We will exhibite according to the measure of our judgement, some certain *Laws* (as it were) of *Laws*, whereby information may be taken, what in all *Laws* is well or ill set down, and Establisht.

APHORISM VII.

But before we descend to the Body of *Laws in particular*; we will briefly touch the Merit and Dignities of *Laws in general*. A *Law* may be held good, that is, *Certain in the intimation*, *Just in the Precept*, *Profitable in the Execution*, *Agreeing with the Form of Government in the present State*; and begetting vertue in those that live under *them*.

TITLE. I.

Of the firſt Dignity of Laws, that they be Certain.

APHORISM VIII.

CErtainty is ſo Eſſential to a *Law*, as without it a *Law* cannot be *Juſt*; *Si enim incertam vocem det Tuba, quis ſe parabit ad Bellum?* So if the Law give an *uncertain ſound*, who ſhall prepare himſelf to obey? A Law then ought to give warning before it ſtrike: and it is a good Rule, *That is the beſt Law which gives leaſt liberty to the Arbitrage of the Judge*, which is that, the *Certainty* thereof affecteth.

APHORISM. IX.

Incertainty *of Laws* is of two ſorts; one where *no Law is preſcribed*; the other, *when a Law is difficile and dark:* we muſt therefore firſt ſpeak of *Cauſes omitted* in the *Law*; that in theſe likewiſe there may be found ſome Rule of *Certainty*.

Of Caſes omitted in Law.

APHORISM X.

THe narrow compaſs of man's wiſdom, cannot comprehend all caſes which time hath found out; and therefore *Caſes omitted, and new* do often preſent themſelves. In theſe caſes there is applied a threefold remedy, or ſupplement; either by a proceeding upon *like Caſes*, or by the uſe of *Examples*, though they be not grown up into Law; or by *Juriſdictions*, which award according to the Arbitrement of ſome Good Man, and according to ſound judgement; whether they be *Courts Pretorian, or of Equity, or Courts Cenſorian or of Penalty*.

Of Proceeding upon like Preſidents; *and of the* Extenſions of *LAWS*.

APHORISM XI

IN *Caſes omitted*, the Rule of Law is to be deduced from *Caſes of like nature*; but with Caution and Judgement. Touching which theſe Rules following are to be obſerved. *Let Reaſon be fruitful; Cuſtom be barren, and not breed Caſes.* Wherefore whatſoever is accepted againſt the *Sence and Reaſon* of a Law; or elſe where the *Reaſon* thereof is not apparent, the ſame muſt not be drawn into conſequence.

APHO-

APHORISM XII.

A ſingular Publick Good doth neceſſarily introduce *Caſes pretermitted.* Wherefore when a Law doth notably and extraordinarily reſpect, and procure the profit and advantage of a State, *Let the interpretation be ample and extenſive.*

APHORISM XIII.

It is a hard Caſe to torture Laws, that they may torture Men. We would not therefore *that Laws Penal, much leſs Capital, ſhould be extended to new Offences:* yet if it be an old Crime, and known to the Laws, but the Proſecution thereof falls upon a new Caſe, not foreſeen by the Laws; we muſt by all means depart from the *Placits of Law*, rather than that offences paſs unpuniſht.

APHORISM XIV.

In thoſe ſtatutes, which the *Common Law* (ſpecially concerning caſes frequently incident, and are of long continuance) doth abſolutely repeal; *We like not the proceeding by ſimilitude, unto caſes omitted:* for when a *State* hath for a long time wanted a *whole Law*, and that, in *Caſes expreſt*; there is no great danger if the *caſes omitted* expect a remedy by a *new ſtatute.*

APHORISM XV.

Such conſtitutions as were manifeſtly, *the Laws of Time*, and ſprung up from emergent Occaſion, then prevailing in the *Common-wealth*; the ſtate of times once changed, they are reverenc'd enough, if they may conſerve their authority within the limits of their own proper caſes: and it were prepoſterous any way to extend and apply them to *Caſes omitted.*

APHORISM XVI.

There can be no *Sequel of a Sequel*, but the extention muſt be arreſted within the limits of *immediate Caſes*: otherwiſe we fall by degrees upon *unreſembling Caſes*; and the ſubtilty of wit will be of more force, than the Authority of Law.

APHORISM XVII.

In Laws and Statutes of a *compendious ſtile*, *extention* may be made more freely; but in thoſe *Laws* which are punctual in the *enumeration of Caſes* Particular, more verily: for as *exception* ſtrengthens the force of a *Law*, in *Caſes not excepted*; ſo *enumeration* weakens it, in Caſes not *enumerated.*

APHO-

APHORISM XVIII.

An *Explanatory Statute* dams up the ſtreams of a *Former Statute*; neither is the extenſion received afterwards, in the one or the other: for their is no *ſuper-extenſion* can be made by a *Judge*, where once an *extenſion* hath begun to be made by a *Law*.

APHORISM XIX.

The *Form* of Words, and Acts of Courts, doth not admit an *Extenſion* upon like Caſes; for that looſeth the nature of *Formality*, which departs from Cuſtom to Arbitrement: and the introduction of *new Caſes* imbaſeth the Majeſty of the *old*.

APHORISM XX.

Extenſion of Law is aptly applied unto *Caſes Poſt-nate*, which were not exiſtent in nature, when the Law was enacted: for where the Caſe could not be expreſt, becauſe there were none ſuch extant; a *Caſe omitted* is accepted for a *Caſe expreſt*, if the reaſon be the ſame.

So for *Extenſion of Laws in Caſes omiſt*, let theſe Rules ſuffice. *Now we* muſt ſpeak of the uſe of *Examples*.

Of Preſidents, and the uſe thereof.

APHORISM XXI.

NOw it follows we ſpeak of *Examples*, from which *Right* is inferr'd, where *Law* is deficient: as for *Cuſtom*, which is a kind of *Law*; and for *Preſidents* which by frequent Practice are grown into Cuſtom, as into a *Tacite Law*; we will ſpeak in due place. But now we ſpeak of *Examples* or *Preſidents*, which rarely and ſparſedly fall out; and are not yet grown up to the ſtrength of a *Law*; namely when, and with what caution a *Rule* of *Law* is to be derived from them, where *Law is Deficient*.

APHORISM XXII.

Preſidents muſt be derived from *Good* and *Moderate*; and not from *Bloudy*, *Factious*, or *Diſſolute Times*: for *Examples* fetch from ſuch times, are a Baſtard iſſue, and do rather Corrupt, than Inſtruct.

APHORISM XXIII.

In *Examples* the more *Modern*, are to be reputed the *more ſafe*: for that which was but lately done, and no inconvenience enſued thereon, why may it not be done again? Yet nevertheleſs *Recent Examples* are of leſs Authority: and if perchance it ſo fall out, that a Re-

a Reformation must be made, *Modern Presidents* taste more of their own *Times*, than of right *Reason*.

APHORISM XXIV.

But *more Ancient Presidents* must be received with caution, and choice: for the Revolution of an Age altereth many things; so as what might seem *Ancient* for Time, the same through perturbation, and inconformity to the present Age, may be altogether *New*. Wherefore the *examples* of a *middle time* are best; or of such *an Age*, as best sorts with the *Present Times*; which now and then the Time further off better represents, than the *Time close at hand*.

APHORISM XXV.

Keep your self within, or rather on this side the *limits of an Example*, and by no means surpass those bounds: for where there is no *Rule of Law*, all ought to be entertain'd with jealousie: wherefore here, as in obscure Cases, *follow that which is least doubtful*.

APHORISM XXVI.

Beware of *Fragments* and *Compends* of *Examples*; and view the *Examples* entire, and every particular passage thereof: for if it be inequitable and unreasonable *before a perfect comprehension of the whole Law, to make a judgement upon a Part, or Paragraph thereof*; much more should this Rule hold in *Examples*, which unless they be very square and proper, are of doubtful use and application.

APHORISM XXVII.

In *Examples* it imports very much thorough what hands they have past, and have been transacted; for if they have gone current with *Clerks* only and *Ministers* of *Justice*, from the *course of some Courts*, without any notice taken thereof by *superiour Counsellors*; or with the *Master of Errors*, *the People*; they are to be rejected and little esteemed of: but if they have been such precise *Presidents* to Counsellors of Estate, Judges or Principal Courts, as that it must needs be, that they have been strengthened by the tacite approbation, at least, of Judges; they carry the more Reverence with them.

APHORSIM XXVIII.

Presidents that have been publisht, however less practised, which being debated and ventilated by mens discourses and disceptations have yet stood out unargued, are of greater Authority: but such as have remained buried, as it were, in Closets and Archives, are of less: for, *Examples like waters are most wholsome in the running stream*.

APHORISM XXIX.

Examples that refer to *Laws*, we would not have them drawn from writers of *History*, but from publick *Acts*, and more *diligent Traditions:* for it is an infelicity familiar even with the beſt Hiſtorians, that they paſs over *Laws and Judicial proceedings* too ſlightly: and if perhaps they have uſed ſome diligence therein, yet they vary much from *Authentick Conſtitutions.*

APHORISM XXX.

An *Example*, which a contemporary Age, or a time neereſt unto it hath repeal'd, ſhould not eaſily be taken up again, though the like caſe ſhould afterwards enſue: nor makes it ſo much for an *Example*, that men have ſometimes uſed it; as it makes againſt an *example*, that upon experience, they have now relinquiſht *it.*

APHORISM XXXI.

Examples are admitted into Counſils; but do in like manner preſcribe or command; therefore let *them* be ſo moderated, that the Authority of the time paſt, may be bowed and plied to the practice of the time preſent. And thus much concerning information from *Preſidents* where *Law* is Deficient. Now follows that we ſpeak of *Courts Prætorian* and *Cenſorian*; Courts of Equity, and of Penalty.

Of Courts Prætorian and Cenſorian.

APHORISM XXXII.

LEt there be *Courts* and *Juriſdictions*, which may define according to the Arbitrement of ſome Good man, and according to ſound judgement: for the *Law* (as is obſerv'd before) cannot provide for *all Caſes*; but is fitted to ſuch occurrences as commonly fall out; and Time (as was ſaid by the Ancients) *is a moſt wiſe Thing, and daily the Author and Inventor of new Caſes.*

APHORISM XXXIII.

New caſes fall out both in *Matters Criminal*, which have need of Penalty, and in *Matters Civil*, which have need of Relief: the *Courts* which reſpect the Former, we call *Cenſorian*; which reſpect the latter, *Prætorian.*

APHORISM XXIV.

Let the *Cenſorian Courts of Juſtice*, have juriſdiction and Power not only of *puniſhing new offences*; but alſo of *increaſing Penalties* aſſigned

by

by the Laws for *old crimes*, if the caſes be hainous and enormous, ſo they be not *Capital*: for a Notorious guilt, as it were, a new Caſe.

APHORISM XXXV.

In like manner, let *Prætorian Courts of Equity*, have power to *qualifie the Rigor of Law*; as alſo of *ſupplying the Defects of Law*: for if a Remedy ought to be extended to him whom *the Law hath paſt by*; much more to him whom *it hath wounded.*

APHORISM XXXVI.

Let theſe *Cenſorian* and *Prætorian Courts* be by all means limited within *Caſes Hainous* and extraordinary; and not invade ordinary Juriſdictions; leſt peradventure the matter extend to the *ſupplantation*, rather than the *ſupplement* of Law.

APHORISM XXXVII.

Let theſe *Juriſdictions* reſide only in the *Higheſt Courts of Judicature*, and not be communicated to *Courts inferior*: For the Power of *extending*, or *ſupplying*, or *Moderating Laws*, little differs from the Power of *Making* them.

APHORISM XXXVIII.

But let not theſe *Courts* be aſſigned over to *one man*, but conſiſt of *Many*: Nor let the Decrees thereof iſſue forth with ſilence, but let the Judges alleage Reaſons of their ſentence, and that openly in the Audience of the Court; that what is free in the Power, may yet in the fame and reputation be confined.

APHORISM XXXIX.

Let there be no *Rubrics of Bloud*; neither Define of *Capital crimes* in what Court ſoever, but from a known and certain Law; for God himſelf firſt denounced Death, afterwards inflicted it. Nor is any man to be put to death, but he that knew before-hand, *that he ſinned againſt his own life.*

APHORISM XL.

In *Courts of Cenſure*, give way to a third Trial, that a neceſſity be not impoſed upon Judges of abſolving or of condemning, but that they may pronounce a *Non liquet*; ſo in like manner, let *Laws Cenſorian*, not only be a *Penalty*, but an *Infamy*, that is, which may not inflict a puniſhment, but either end in admonition; or elſe chaſtiſe the delinquent with ſome light touch of Ignominy, and as it were, a bluſhing ſhame.

APHORISM XLI.

In *Cenſorian Courts* let the *firſt aggreſſions*, and the middle Acts of Great offences, and wicked attempts be puniſht; yea although they were never perfectly accompliſht: and let that be the chiefeſt uſe of *thoſe Courts*; ſeeing it appertains to *ſeverity*, to puniſh the firſt approaches of wicked enterprizes; and to *Mercy* to intercept the perpetration of them by correcting middle Acts.

APHORISM XLII.

Special regard muſt be taken, that in *Prætorian Courts*, ſuch Caſes be not countenanc'd, which the Law hath not ſo much pretermitted, as ſlighted as Frivolous; or, as odious, judg'd unworthy redreſs.

APHORISM XXLIII.

Above all it moſt imports the *Certainty of Laws*, that Courts of *Equity* do not ſo ſwell and overflow their banks, as under pretence of *mitigating the Rigor of Laws*, they do diſſect or relax the ſtrength and ſinews thereof, by drawing all to *Arbitrement*.

APHORISM XLIV.

Let not *Pretorian Courts* have Power to Decree againſt *expreſs ſtatute*, under any pretence of equity: for if this ſhould be permitted, a *Law-interpreter*, would become a *Law-maker*; and all matters ſhould depend upon *Arbitrement*.

APHORISM XLV.

Some are of opinion, that the Jurisdiction of Defining according to *Equity and Conſcience*; and that other, which proceeds according to *ſtrict Law*; ſhould be deputed to the *ſame Courts*; but others ſay to *ſeveral*: by all means let there be *a ſeparation of Courts*; for there will be no *diſtinction of Caſes, where there is commixtion or Jurisdictions*; but you ſhall have *Arbitrement* incroach upon, and at laſt, ſwallow up *Law*.

APHORISM XLVI.

The *Tables of the Pretors* amongſt the Romans came in uſe upon good ground: in theſe the *Pretor* ſet down and publiſht afore-hand, by what form of Law he would execute Judicature. After the ſame example, Judges in *Pretorian Courts*, ſhould propound *certain Rules* to themſelves (ſo far as may be) and openly publiſh them: *for that is the beſt Law, which gives leaſt liberty to the Judge; he the beſt Judge that takes leaſt liberty to himſelf.* But of theſe *Courts* we ſhall ſpeak more at large, when we come to the Title *De Judiciis*; we now ſpeak of them

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in paſſage only, ſo far as they clear and ſupply that which is omitted by the Law.

Of the Reflective Aſpect, or Reference of Laws one to another.

APHORISM XLVII.

THere is likewiſe another kind of *ſupplement of Caſes omitted*; when one Law falleth upon another, and withall draws with it *Caſes pretermitted.* This comes to paſs in *Laws or Statutes*, which (as the uſual expreſſion is) look back or *reflect* one upon another. *Laws* of this nature, are rarely and with great Caution to be alleag'd: for we like it not, to ſee a *two Fac'd* Janus *in Laws.*

APHORISM XLVIII.

He that goes about to elude and circumvent the words and ſentence of Law by *Fraud*, and *captious Fallacies*, deſerves in like manner to be himſelf inſnar'd by a ſucceeding Law: wherefore in caſe of *ſubtil ſhifts* and *ſiniſter deviſes*, it is very meet that laws ſhould *look back* upon and *mutually ſupport* one another, that he who ſtudies evaſions, and everſion of *Laws Preſent*, may yet ſtand in awe of *future Laws.*

APHORISM XLIX.

Laws which ſtrengthen and eſtabliſh the true *intentions of Records and Inſtruments*, againſt the *Defects of Forms and Solennities*, do rightly comprehend matters paſt: for the greateſt inconvenience in a law that *refers back*, is, that it diſturbeth: But theſe *confirmatory Laws*, reſpect the peace and ſetling of thoſe caſes, which are tranſacted and determin'd; yet we muſt take heed that *caſes already adjudg'd*, be not *reverſt or violated.*

APHORISM L.

We muſt be very careful that, not thoſe *Laws* alone, be thought to *reſpect things paſt*, which invalid *caſes already decided*; but thoſe alſo which *prohibite* and *reſtrain future caſes* neceſſarily connext with *matters paſt.* As for example, if a Law ſhould interdict ſome kind of Trades-men the vent of their commodities for *hereafter:* the Letter of this Law is for the *future*; but the ſence and meaning takes hold of the *time paſt*; for now it is not warrantable for ſuch perſons to get their living *this* way.

APHORISM LI.

Every *Declaratory Law*, although there be no mention of *time paſt*; yet by the force of the Declaration, it is by all means to be extended

tended to *matters paſt:* for the *Interpretation* doth not then begin to be in force, when it is *declared*; but is made *contemporary* with the *Law it ſelf.* Wherefore never enact *declaratory Laws*, but in caſe where Laws may in equity refer and *look back* one upon another. *And here we have done with that part which handles the* Incertitude of Laws, *where no Law is found. It remains, we now ſpeak of that other part, namely where there is a Law extant, but ſuch a one as is* Perplext *and* Obſcure.

Of the Obſcurity of Laws.

APHORISM LII.

Obſcurity of Laws ſprings from four cauſes: either from the exceſſive *accumulation of Laws*, ſpecially where there is a mixture of Obſolete Laws: Or from an *ambiguous*, or not perſpicuous and *delucid deſcription of Laws:* or from the *manner of expounding Law*, either altogether neglected, or not rightly purſued: or laſtly, *contradiction* and *incertainty of judgments.*

Of the Exceſſive Accumulation of Laws.

APHORISM LIII.

THe Prophet ſaith, *Pluet ſuper eos Laqueos*; now there are no worſe ſnares than the ſnares of Laws, ſpecially Penal; if they be *immenſe for number*; and through the alterations of times *unprofitable*; they do not *preſent a torch, but ſpread a net to our feet.*

APHORISM LIV.

There are two ways in uſe of making *a new Statute*; *the one* eſtabliſheth and ſtrengthens the *Former Statute* about the ſame ſubject; and then adds and changes ſome things: *the other* abrogates and cancels what was Decreed before, and ſubſtitutes *de integro, a new and uniform Law.* The *latter way* we approve: for by the *former way* Decrees become complicate and perplext; yet what is undertaken is indeed purſued, but the Body of Law is in the mean time corrupted. But certainly the more diligence is required in the *latter*, where the Deliberation is of the *Law it ſelf*; that is, the Decrees heretofore made, are to be ſearched into, and duely weighed and examin'd, before the Law be publiſht: but the chief point is, that by this means the *Harmony of Laws* is notably advanced for the future.

APHORISM LV.

It was a cuſtom in the State of *Athens*, to delegate ſix perſons, for to reviſe and examine every year the *contrary Titles of Law*, which they

they called *Anti-nomies*; and ſuch as could not be reconciled, were propounded to the people, that ſome *certainty* might be defined touching them. After this example, let ſuch in every State, as have the Power of making Laws, review *Anti-nomies* every third or fifth year, or as they ſee cauſe. And theſe may be firſt ſearcht into, and prepar'd by Committees aſſign'd thereto, and after that exhibited to Aſſemblies; that ſo what ſhall be approv'd, may by ſuffrages be eſtabliſht and ſetled.

APHORISM LVI.

And let there not be too ſcrupulous and anxious pains taken in reconciling *Contrary Titles of Law*, and of Salving (as they term it) all points by ſubtil and ſtudied Diſtinctions. For this is the Web of Wit; and however it may carry a ſhew of Modeſty and Reverence, yet it is to be reckoned in the number of things Prejudicial; as being that which makes the whole body of Law ill-ſorted, and incoherent. It were far better that the worſt *Titles* were cancel'd, and the reſt ſtand in force.

APHORISM LVII.

Obſolete Laws, and ſuch as are grown out of uſe, as well as *Anti-nomies*, ſhould be propounded by delegates, as a part of their charge to be repeal'd: for ſeeing expreſs Statute cannot regularly be voided by *Diſuſe*; it falls out that through a Diſeſtimation of *Obſolete Laws*, the authority of the reſt is ſomewhat embaſed; and *Mezentius* Torture enſues; *that Laws alive are killed with the embracements of Laws dead: but above all beware of a* Gangreen in Laws.

APHORISM LVIII.

So likewiſe for *Obſolete Laws* and Statutes, and ſuch as are not lately publiſht; let the *Pretorian Courts* have power: in the mean ſpace, to define contrary to them: for although it hath been ſaid not impertinently, *no man ought to make himſelf wiſer than the Laws*; yet this may be underſtood of Laws, when they are awake, not when they are aſleep. On the other ſide, let not the more *recent Statutes*, which are found prejudicial to the *Law-publick*, be in the Power of the Judges; but in the Power of Kings and Counſellors of Eſtate, and ſupreme Authorities for Redreſs, by ſuſpending their execution through Edicts and Acts; until Parliamentary Courts, and ſuch High Aſſemblies meet again, which have power to abrogate them; leſt the ſafety of the Common-wealth ſhould in the mean while be endanger'd.

Of New Digeſts of Laws.

APHORISM LIX.

BUt if *Laws accumulated upon Laws*, ſwell into ſuch vaſt volumes, or be obnoxious to ſuch confuſion, that it is expedient to reviſe them anew, and to reduce them into a ſound and ſolid body; intend it by all means; and let ſuch a work be reputed an Heroical noble work; and let the Authors of ſuch a work, be rightly and deſervedly ranckt in the number of the *Founders* and *Reſtorers of Laws.*

APHORISM LX.

This *Purging of Laws*, and the contriving of a new Digeſt is five ways accompliſht. *Firſt*, let *Obſolete Laws*, which *Juſtinian* terms *old Fables* be left out. *Secondly*, let the moſt approved of *Antinomies* be received; the contrary aboliſht. *Thirdly*, let all *Coincident Laws*, or *Laws* which import the ſame, and are nothing elſe but repetitions of the ſame thing, be expung'd; and ſome one, the moſt perfect among them, retain'd inſtead of all the reſt. *Fourthly*, if there be any *Laws which determine nothing*, but only propound Queſtions, and ſo leave them undecided, let theſe likewiſe be caſher'd. *Laſtly*, let *Laws too wordy* and too prolix be abridged into a more narrow compaſs.

APHORISM LXI.

And it will import very much for uſe, to compoſe and ſort apart in a new *Digeſt of Laws*, Law recepted for *Common Law*, which in regard of their beginning are time out of mind; and on the other ſide *Statutes* ſuperadded from time to time: ſeeing in the delivery of a Juridical ſentence, the interpretation of *Common Law*, and *Statute-Laws* in many points is not the ſame. This *Trebonianus* did in the Digeſts and Code.

APHORISM LXII.

But in this *Regeneration* and *new ſtructure of Laws*, *retain preciſely the Words and the Text of the Ancient Laws*, and of the Books of Law; though it muſt needs fall out that ſuch a collection muſt be made by centoes and ſmaller portions: then ſort them in order. For although this might have been performed more aptly, and (if you reſpect right reaſon) more truly, by a *New Text*, than by ſuch a conſarcination; yet in Laws, not ſo much the *ſtile* and *deſcription*, as *Authority*, and the Patron thereof, *Antiquity*, are to be regarded: otherwiſe *ſuch a work* might ſeem a *ſcholaſtick buſineſs and method*, rather than *a body of commanding Laws.*

APHO-

APHORISM LXIII.

In this *New Digeſt of Laws*, upon good adviſement a caveat hath been put in; that the *Ancient volumes of Law* ſhould not be utterly extinguiſht, and periſh in oblivion; but ſhould at leaſt remain in Libraries; though the common and promiſcuous uſe thereof might be retain'd. For in Caſes of weighty conſequence, it will not be amiſs to conſult and look into the mutations and continuations of *Laws paſt*: and indeed it is uſual to ſprinkle modern matters with Antiquity. *And this new corps of Law*, muſt be confirmed only by ſuch, who in every ſtate have the power of making Laws; leſt perchance under colour of *Digeſting Ancient Laws*, *new Laws*, under-hand be conveyed in.

APHORISM LXIV.

It could be wiſht that this *Inſtauration of Laws*, might fall out, and be undertaken in *ſuch times*, as, for learning and experience excel *thoſe more Ancient times*, whoſe Acts and Deeds they recognize: which fell out otherwiſe in the works of *Juſtinian*. For it is a great unhappines, when the works of the Ancient, are maimed, and recompiled, by the judgement and choice of a leſs wiſe and learned Age: but oft times that is neceſſary which is not the beſt.

Thus much be ſpoken of the Obſcurity of Laws, ariſing from the exceſſive and confuſed accumulation thereof. Now let us ſpeak of the dark and doubtful Deſcription of them.

Of the Perplext and Obſcure Deſcriptions of *LAWS*.

APHORISM LXV.

Obſcure Deſcription of Laws ariſes either from the *Loquacity or Verboſity* of them; or again from *extream Brevity*; or from the *Preamble of a Law* repugnant with the *Body of a Law*.

APHORISM LXVI.

It follows that we now ſpeak of the *Obſcurity of Law*, ariſing from a corrupt and crooked *deſcription thereof*. The *Loquacity* and *Prolixity*, which hath been uſed in ſetting down Laws, *we diſlike*: neither doth ſuch a writer any way compaſs what he deſires, and labours for; but rather the quite contrary. For while a man endeavours to purſue and expreſs *every Particular caſe in apt and proper terms*, hoping to gain more Certitude thereby; contrariwiſe it falls out, that through *many words, multitude of Queſtions* are ingendred; ſo as a more ſound and ſolid interpretation of Law, according to the genuine ſenſe and mind thereof, is much intercepted through the noiſe of words.

APHORISM LXVII.

And yet notwithſtanding a *too Conciſe and affected Brevity* for Majeſties ſake, or as more Imperial, is not therefore to be approved, ſpecially in theſe times; leſt Law become perchance, a *Lesbian Rule*. Wherefore a *middle temper'd ſtile* is to be embraced; and a generality of words well ſtated to be ſought out; which though it do not ſo throughly purſue caſes comprehended, yet it excludes caſes not comprehended clearly enough.

APHORISM LXVIII.

Yet in ordinary and Politick Laws and Edicts, wherein for moſt part no man adviſeth with his Counſel, but truſteth to his own judgment, all ſhould be more *amply explicated and pointed out, as it were, with the finger*, even to the meaneſt capacity.

APHORISM LXIX.

So neither ſhould we allow of *Preambles* to Laws, which amongſt the ancients were held impertinencies, and which introduce *Diſputing* and not *commanding Laws*, if we could well away with ancient cuſtom. But theſe *Prefaces* commonly (as the times are now) are neceſſarily prefixt, not ſo much for explication of Law, as for perſwaſion that ſuch a Law may paſs in the ſolemn meeting of a State; and again, to give ſatisfaction to the communalty. Yet ſo far as poſſible may be, *let Prologues be avoided, and the Law begin with a command.*

APHORISM LXX.

The Mind and Meaning of a Law, though ſometimes it may be drawn not improperly from *Prefaces* and *Preambles* (*as they term them*;) yet the latitude and extention thereof, muſt not be fetcht from thence. For a *Preamble* by way of example, ſometimes fetcheth in, lays hold upon ſome of the plauſible and moſt ſpecious paſſages; when yet the Law compriſeth many more: or on the contrary, the Law *reſtrains* and *limits* many Caſes, the reaſon of which *limitations* to inſert in the *Preface* were *ſuperfluous*. Wherefore the *dimenſion* and *latitude* of a Law muſt be taken from the Body of a Law: *for a Preamble often falls either ſhort, or over.*

APHORISM LXXI.

And there is a very *vitious manner of Recording of Laws*, that is, when the caſe at which the *Law* aimeth, is *expreſt at large in the preamble*, afterward from the force of the word (*The like*) or ſome ſuch *term of relation*, the *Body of a Law* is reverſt into the *Preamble*; ſo as the *Preamble* is inſerted and incorporated into the Law it ſelf; which is

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an obſcure and not ſo ſafe a courſe; becauſe the ſame diligence uſeth not to be taken in pondering and examining the words of a *Preamble*, as there uſeth to be done in the *Body of a Law* it ſelf. This part touching the *Incertainty of Laws* proceeding from an *ill Deſcription of them* we ſhall handle more at large hereafter, when we come to treat of the *Interpretation of Laws*. Thus much *of the obſcure Deſcription of Laws*. Now let us ſpeak of the ways of expounding Laws.

Of the divers ways of expounding Law and ſolving Doubts.

APHORISM LXXII.

THe ways of *expounding Law* and *ſolving Doubts*, are five. For this is done either by *Court-Rolls* and *Records*; or by *Authentick Writs*; or by *ſubſidiary Books*; or by *Prelections*; or by *Reſponſes* and *Reſolutions of Wiſe men*. All theſe, if they be well inſtituted and ſet down, will be ſingular helps at hand againſt the *obſcurity* of Laws.

Of the reporting of Judgements.

APHORISM LXXIII.

ABove all, let *the Judgements* delivered in higher, and *Principal Courts* of Judicature, and in matters of *grave importance*, ſpecially *Dubious*, and which have ſome Difficulty and *Newneſs* in them, be taken with faith and diligence. For *Decrees are the Anchors of of Law, as Laws are of the Republick.*

APHORISM LXXIV.

The manner of collecting ſuch *Judgements* and *Reporting* them, let be this. *Regiſter the caſe preciſely*; the *Judgements exactly*; *annex the Reaſons of the Judgements* alleadged by the Judges; mingle not Authorities of *Caſes brought for example* with *Caſes Principal*. As for *Perorations of Pleaders*, unleſs there be ſomething in them very remarkable, paſs them over with ſilence.

APHORISM LXXV.

The Perſons which ſhould Collect *theſe Judgements*, Let them be of the order and rank of the *learneſt Advocates*, and let them receive a liberal Remuneration from the State. Let not the *Judges* themſelves meddle, at all, with theſe *Reports*; leſt perchance, devoted to their own opinions, and ſupported by their own Authority, they *tranſcend the limits of a Reporter.*

APHORISM LXXVI.

Digeſt *theſe Judgments* according *to the order* and *continuation of time*, not according to *Method* and *Titles*: for *writings of this nature* are, as it were, the *Hiſtories* and *Reports of Laws*; nor do the *Decrees* alone, but their *times* alſo give light to a wiſe Judge.

Of Authentick Writers.

APHORISM LXXVII.

LEt the *Body of Law* be built only upon the Laws themſelves, which conſtitute the *common Law*; next of *Decrees* or *Statutes*; in the third place of *Judgements enrolled*; beſides theſe, either let there be no other *Authenticks* at all, or ſparingly entertain'd.

APHORISM LXXVIII.

Nothing ſo much imports *Certainty of Laws* (of which we now diſcourſe) as that *Authentick Writings* be confined within moderate bounds; and that the *exceſſive multitude of Authors* and Doctors of the Laws, whereby the mind and ſentence of Laws are diſtracted; the Judge confounded; proceedings are made immortal; and the Advocate himſelf, deſpairing to read over and conquer ſo many Books, betakes himſelf to Abridgements; be diſcarded. It may be ſome good gloſs, and ſome few of Claſſick Writers, or rather ſome ſmall parcel of few Writers, may be received for *Authenticks*. Yet of the *reſt*, ſome uſe may be made in Libraries, where Judges or Advocates, may as occaſion is offered read their Diſcourſes: but in cauſes to be pleaded, let them not be permitted to be brought and alleaged in the Court, nor grow up into Autority.

Of Auxiliary Books.

APHORISM LXXIX.

LEt not the knowledge and practice of *Law* be deſtituted, but rather well provided of *Auxiliary Books*. They are in general ſix ſorts, Inſtitutes; of the ſignification of Words; of the Rules of Law; Ancient Records; Abridgements; Forms of Pleading.

APHORISM LXXX.

Young Students and Novices are to be enter'd by *Inſtitutes*; that they may the more profoundly and orderly draw and take in the knowledge and Difficulties of the *Laws*. Compoſe theſe *Inſtitutes* after a clear and perſpicuous manner. In theſe *elementary Books* run over the whole *private Law*; not paſſing by ſome Titles, and dwelling too long upon others; but briefly touching ſomething in all; that coming

coming to read through the *whole body of Laws*, nothing may be presented altogether ſtrange; but what hath been taſted, and preconceiv'd by ſome ſlight notion. Touch not the *Publick Law in Inſtitutes*, but let that be deduced from the *Fountains of themſelves.*

APHORISM LXXXI.

Compile a Commentary upon the *Terms of Law*: Be not too curious and tedious in the explication thereof; and of rendring their ſenſe; for the ſcope here, is not exactly to ſeek out the *Definition of Words*, but ſuch *explications* only, as may clear the paſſage to the reading of the *Books of Law.* Digeſt not this Treatiſe by the *letters of the Alphabet*: leave that to ſome Index; but let ſuch words as import the ſame thing be ſorted together; that in the comprehenſion of the ſenſe, one may adminiſter help upon the other.

APHORISM LXXXII.

A ſound and well-labour'd Treatiſe of the *divers Rules of Law*, conduceth (if any thing doth) to the *certainty of Laws.* A work worthy the Pen of the greateſt Wits, and wiſeſt Juriſts. Nor do we approve what is extant in this kind. And not only noted and common *Rules*, are to be collected, but alſo others more ſubtil and abſtruſe, which may be abſtracted out of the *Harmony of Laws*, and *Judged Caſes*; ſuch as are ſometimes found in the *beſt Rubrics*; and theſe are the general *Dictates of Reaſon*, and the *Ballaſt*, as it were *of Law.*

APHORISM LXXXIII.

But all *Decrees and Placits of Law*, muſt not be taken for *Rules*, as is wont to be, abſurdly enough: for if this ſhould be admitted, then ſo *many Laws*, ſo *many Rules*; for a *Law* is nothing elſe, than a *commanding Rule.* But accept thoſe for *Rules* which cleave to the very *Form of Juſtice*, from whence for moſt part the ſame *Rules* are commonly found through the *Civil Laws* of Different *States*; unleſs perhaps they vary for the reference to the *Forms of publick Governments.*

APHORISM LXXXIV.

After the *Rule* is divided in a brief and ſubſtantial comprehenſion of words; let there be, *for explication*, annext *examples*, and moſt clear and luculent *Deciſions of Caſes*; *Diſtinctions* and *exceptions* for *limitations*; *Points concurrent in ſence*, for *Amplification* of the *ſame Rule.*

APHORISM LXXXV.

It is well given in Precept, *that a Law ſhould not be drawn from Rules*; *but the Rule from the Law in force.* Neither is a *Proof* to be taken from the words of a *Rule*, as if it were a *Text of Law*: for *a Rule* (as the ſea-man's needle doth the Poles) *indicates* only, not *Determines Laws.*

APHO-

APHORISM LXXXVI.

Beſides the *Body of Law*, it will avail alſo, to ſurvey the *Antiquities or ancient Records of Laws*, whoſe Authority, though it be vaniſht, yet their Reverence remains ſtill. And let the *Writings* and *Judgements* concerning *Laws*, be received for the *Antiquities of Laws*, which in time preceded the *Body of Laws*; whether they were publiſht or not: for theſe muſt not be loſt. Therefore out of theſe *Records* ſelect what ever is moſt uſeful (for there will be found much vain and frivolous matter in them)and digeſt them into one volume; leſt *old fables*, (as *Trebonianus* calls them) be mixt with the *Laws themſelves.*

APHORISM LXXXVII.

And it much imports the practick part of Laws, that the whole Law be *Digeſted into Places and Titles*; whereto a man may have (as occaſion ſhall be given) a ſudden recourſe, as to a furniſht Promptuary for preſent practice. Theſe *Books of Abridgements*, both reduce into *Order* what was diſperſed, and *abreviate* what was diffuſed and *Prolix* in Law. But caution muſt be taken that theſe *Breviaries*, make not men prompt for the *practick part*, and ſlothful for the *knowledge it ſelf*: for their proper uſe and office is this, that by them the *Law* may be tilled over again, and not throughly learned. And theſe *Summaries* muſt by all means be collected with great diligence, faith and judgement, leſt they *commit Felony againſt the Law.*

APHORISM LXXXVIII.

Make a Collection of the *divers Forms of Pleading* in every kind: for this conduceth much to the practick Part: and certainly theſe *Forms* do diſcover the Oracles and ſecret Myſteries of Laws: for there are many things which lie hidden in Laws; But in *Forms* of Pleadings, they are better and more largely diſplayed; —*like the fiſt to the Palm.*

Of Reſponſes and Reſolutions of Doubts.

APHORISM LXXXIX.

SOme courſe muſt be taken for the *cutting off*, and ſatisfying *particular Doubts* which emerge from time to time: for it is a hard caſe that they which deſire to ſecure themſelves from error, ſhould find no guide to the way: but that preſent buſineſſes ſhould be hazarded; and there ſhould be no means to know the Law before the matter be diſpatcht.

APHORISM XC.

That the Reſolutions of the Wiſe, given to Clients touching *point of Law*, whether by *Advocates* or *Profeſſors*, ſhould be of ſuch Authority, that it may not be lawful for the Judge to depart from their opinion, we cannot approve. *Let Law be derived from ſworn Judges.*

APHO-

APHORISM XCI.

To Feel and ſound Judgements by feigned Cauſes and Perſons, that by this means, men might find out what the Courſe and proceeding of Law will be, we approve not: for it diſhonoureth the Majeſty of *Laws*, and is to be accounted a kind of *prevarication* or double dealing; *and it is a foul ſight to ſee places of Judicature to borrow any thing from the ſtage.*

APHORISM XCII.

Wherefore let, as well the *Decrees*, as the *anſwers and Counſels* proceed from the Judges alone: thoſe of ſuits depending; theſe of difficult points of Law, in the general. Require not theſe *Deciſions*, whether in cauſes private or publick, from the Judges themſelves, (for this were to make the Judge an Advocate) but of the *Prince*, or of the *State*. *From theſe* let the order be directed unto the *Judges:* and let the *Judges* thus authorized, hear the *reaſons on both ſides; both of the Advocates or of the Committees*, deputed by the parties to whom the matter appertaineth; or of them aſſigned by the Judges themſelves; if neceſſity ſo require: and weighing the Cauſe, let them deliver the Law upon the caſe and declare it. Let theſe *verdicts* and *counſels*, be recorded and notified amongſt *Caſes adjudged*, and be of equal *authority*.

Of Prelections.

APHORISM XCIII.

LEt the *Lectures of Law*, and the exerciſes of thoſe that addreſs themſelves to the ſtudies of Law, be ſo inſtituted and ordered, that all may tend rather to the laying aſleep, than the awaking of Queſtions and Controverſies in Law. For (as the matter is now carried) a School is ſet up, and open amongſt all, to the multiplying of *Altercations and Queſtions in Law*; as if their aim was only to make oſtentation of wit. And this is an old diſeaſe, for even amongſt the Ancients, it was, as it were, a glory, by Sects and Factions, to *cheriſh rather than extinguiſh many queſtions* concerning Law. Provide againſt this inconvenience.

Of the Inſtability of Judgements.

APHORISM XCIV.

JUdgements become *incertain*, either through *immature and too precipitate proceeding to ſentence*; or through *Emulation of Courts*; or through ill and *unſkilful revisiting of Judgements*; or becauſe there is a too *eaſie and expedit way open of Reverſing and Reſcinding them*. Wherefore it muſt be provided, that *Judgements* iſſue forth not without a *ſtaid deliberation had after-hand*; and that Courts bear a *Reve-*

rent

rent respect to one another; and that Decrees *be drawn up faithfully* and wisely; and that the *way to repeal Judgements be narrow*, rocky and strewed, as it were, with sharp stones.

APHORISM XCV.

If a *Judgement* have been awarded upon a *Case* in any Principal Court; and the *like case* intervene in another Court; proceed not to *sentence* before the matter be advised upon in some *solemn Assembly of Judges*: for if *Judgements awarded must needs be repeal'd, yet let them be interred with Honour.*

APHORISM XCVI.

For Courts to be at debate and variance *about Jurisdictions* is a humane frailty; and the more because this intemperance, through a mispriſſion and vain conceit (*that it is the part of a stout resolute Judge to enlarge the priviledges of the Court*) is openly countenanced and spur'd on, whereas it hath need of the Bridle. But that out of this heat of stomach, Courts should so easily *reverse* on both sides *Judgements awarded*, which nothing pertain to *Jurisdiction*, is an insufferable evil, which by all means should be repres'd and punisht; by Kings or Counsels of State, or the form of Government. For it is a President of the worst example, *That Courts, that should distribute Peace, should themselves practice Duels.*

APHORISM. XCVII.

Let there not be a too easie and free passage made to *the Repealing of Judgements* by *Appellations*, and *writs of Error*, or *Re-examination*, and the like. It is maintained by some, that a Suit may be brought into a Higher Court, as entire and untried, the Judgement past upon it, *set aside* and *absolutely suspended*: others are of opinion that the *Judgement it self may stand in force, but the execution thereof may be staid*: neither of these is to be allowed, unless the Courts wherein the Judgement was awarded, were of a base and inferior order: but rather that both the *Judgement stand*, and that the execution thereof go on; so a Caveat be put in by the Defendant for Damages and charges if the *Judgement* should be *reverst*.

But this *Title* touching the *Certainty of Laws* shall suffice for a President to the rest of a * Digest, which we with care and diligence endeavour to contrive. And now have we concluded *Civil Knowledge* (so far as we thought fit to entreat thereof) and together with it *Humane Philosophy*, as also with *Humane Philosophy*; *Philosophy in General.* Wherefore being now at length at some pause, and looking back into that we have past through; this our writing seems to us not much unlike those sounds and Preludes, which *Musicians* make while they are tuning their *Instruments*; which is harsh and unpleasing to hear, but yet is a cause why the *Musick* is sweeter afterwards.

So

* *Digestum juris Anglicani*; *Sacrum Iustitiæ Templum*; *Opus sane Regium*; *sed nondum conditumque. Tuo seculo Excellentissime Principum, Instaurandum: Tui Nominis Æternitati, consecrandum reservatur.*

So have we been content to employ our pains in tuning the *Inſtrument of the Muſes*, and to ſet it unto a true Harmony, that afterwards they may play who have better hands. *Surely*, when I ſet before me the condition of theſe times, in which *Learning* ſeems to have made her *third Circuit* to Men; and with al diligently behold, with what various ſupplies and ſupports being furniſht, ſhe hath made her viſitation: as are, the *height* and *vivacity* of *many Wits* in this our Age; *the excellent monuments of Ancient writers*, which as ſo many great lights ſhine before us; *the Art of Printing*, which communicates Books with a liberal hand to men of all fortunes; *the travel'd boſom of the Ocean* and of the world, opened on all parts, whereby multitudes of experiments unknown to the Ancients have been diſcloſed; and *Natural Hiſtory*, by the acceſs of an infinite Maſs advanced: *the leaſure* wherewith the Kingdoms and States of Europe every where abound, nor imploying men ſo generally in *Civil Buſineſſes*, as the States of *Græcia* did in reſpect of their *Popularity*; or as the ſtate of the *Romans* did in reſpect of their *Monarchy*: *the Peace* which at this preſent, Brittany, Spain, Italy, as alſo at this inſtant France and many other Countries enjoy: *The Conſumption and Examination* of all that can be imagined or ſaid *in controverſies of Religion*, which now ſo long have taken up ſo many Wits, and diverted them from the ſtudies of *other Sciences*: *the Elevation and Perfection of Your Majeſties Learning*; about whom (as the Birds about the Phœnix) whoſe vollies of wits flock and aſſemble: *Laſtly the inſeparable property which attends time it ſelf*, which is, *ever more and more to diſcloſe truth*: when we think, I ſay, on theſe advantages; we cannot but be raiſed to this Perſwaſion, that this *third period of Learning*, will far ſurpaſs thoſe two former of the *Grecian and Roman Learning*. Only if men will but well and wiſely know their own ſtrength and their own weakneſs both; and take, one from the other, *light of Inventions*; and not *Fire-brands of contradiction*; and eſteem of the Inquiſition of Truth, as a noble enterpriſe, and not as a delight or ornament; and imploy wealth and magnificence to things of worth and excellency, and not to things vulgar and of popular eſtimation.

As for my Labours, if any man ſhall pleaſe himſelf or others in the reprehenſion of them, certainly they ſhall cauſe me put up that ancient requeſt, but of great patience, *verbera, ſed Audi*; *let men reprehend as they pleaſe, ſo they obſerve and weigh what is ſpoken.* Verily the Appeal is lawful (though, it may be, for this matter, not ſo needful) if it be made *from the firſt cogitations of men unto the ſecond*; *and from the neerer times, to the times farther off.*

Now let us come unto the *Learning*, which thoſe two ancient *Periods of time* were not ſo bleſt as to know, I mean *Sacred and Divinely inſpired Theology, the nobleſt Sabbath and Port of all mens Labours and Peregrinations.*

THE

Ninth Book

OF

FRANCIS L. VERULAM

VICOUNT St *ALBAN:*

OF THE

Dignity and Advancement

OF

LEARNING.

To the KING.

CHAP. I.

The Partitions of Inſpired Divinity *are omitted, only acceſs is made to three* Deficients. I. The Doctrine of the right uſe of Humane Reaſon in matters Divine. II. The Doctrine of the Degrees of Unity in the City of God. III. And the Emanations of SS. Scriptures.

AND now (*moſt excellent King*) we have with a ſmall Bark, ſuch as we were able to ſet out, ſail'd about the univerſal circumference, as well *of the old as the new World of Sciences*; with how proſperous winds and courſe, we leave to Poſterity to Judge. What remains but that having accompliſht our Deſigns, we ſhould pay our vows? But there reſts yet behind *Sacred-inſpired-Divinity*; whereof if we ſhould proceed to intreat, we ſhould depart out of the *Pinnace of Humane Reaſon*, and go into the *ſhip of the Church*, which muſt alone be governed by a *Divine ſea-needle*, to direct her courſe aright: for the *Stars of Philoſophy* which hitherto ſhined forth unto us, and were our chief guide, here fail us: it were then meet, we

kept silence in this sacred subject. Wherefore we shall omit the *just partitions of this knowledge*; yet notwithstanding somewhat we will cast into this treasury, by way of good wishes according to the proportion of our slender hability. This we do the rather because we find no coast or space of ground in the whole *Body of Divinity* lying vacant and untilled; so diligent have men been, either in sowing of *Good seed, or sowing of Tares.*

§ *Wherefore we* will propound *three Appendices of Theology*, treating, not of the matter *informed* of by *Divinity*, or to be *informed* of, but only of the *manner of information:* neither will we annex examples, or set down precepts concerning these Tractates, as our manner was to do in the rest; that we refer to *Divines*; for these are (as hath been said) *like meer vows only.*

* SOPHRON sive de legitimo usu RATIONIS humanæ in DIVINIS.

I. *The Prerogative of God* comprehends the whole man; and is extended as well to the *Reason*, as to the *will of Man*; that is, that man renounce himself wholly, and draw near unto God: wherefore as we are to *obey his law*, though we find a reluctation in our *will*, so we are to *believe his word*, though we a find a reluctation in our *Reason:* for if we believe only that which is agreeable unto our *Reason*, we give assent to the *Matter*, not to the *Author*; which is no more than we would do towards a suspected and discredited witness: but *that Faith which was accounted unto Abraham for Righteousness*, was of such a point, as whereat *Sarah laughed*, who therein was an Image of *Natural Reason.* By how much therefore any *Divine Mysterie* is more discordant, and incredible; by so much the more Honour is given to God in *Believing*, and the victory of our *Faith* is made more noble: Nay, even sinners by how much the more they are surcharg'd in conscience, and yet repose a trust in the mercies of God for their salvation, by this do more honour God, *for all desperation is a reproach of the Deity.* Nay farther, (if we truly consider the point) it is an Act more great and high to *believe*, than to *know*, as we now *know:* for in *knowledge* man's mind suffers from *sense*, which results from things materiate; but in *Belief* the spirit suffers from spirit, which is the worthier Agent: the case is otherwise in the *state of Glory*, for then *Faith shall cease, and we shall know, as we are known.* Wherefore we may conclude, that *Sacred Theology* is grounded on, and must be deduced from the *Oracles of God*; and not from the *light of Nature*, or the *Dictates of Reason:* for it is written, *The Heavens declare the Glory of God*, but we never find it written, *The Heavens declare the will of God:* of the *will of God*, it is said, *Ad legem & Testimonia; si non fecerint secundum illud*, &c. This holds not only in those great Mysteries concerning the *Deity*, the *Creation*, the *Redemption*, but appertains also to a more perfect interpretation of the *Law Moral*, *Love your Enemies*; *do good to them that hate you*, &c. *that you may be the children of your heavenly Father, who commands the rain to fall upon the just and unjust*, which words certainly deserve that applause, *Nec vox hominem sonat:* For it is a voice beyond the light of Nature. So likewise we see the Heathen Poets especially, when they fall upon a passion, do still expostulate with *Laws and Moralities* (which yet are far more free and indulgent than *divine*

Gen. 18.

1 Cor. XIII.

Psal. XIX.

Mat. v.

vine Laws) as if in a kind of malignity, they were repugnant to the liberty of nature,

——*Et quod natura remittit*
Invida jura negant—— Plutar. in Alex. M.

So ſaid *Dendamis* the Indian, unto Alexanders Meſſengers, *That he had heard ſomewhat of the name of Pythagoras, and ſome other of the wiſe men of* Grecia, *and that he held them for excellent men; but they had one fault, which was, that they had in too great Reverence and Veneration, an imaginary thing they called Law and Manners.* So it muſt be confeſt, that a great part of the *Law Moral* is of that perfection, whereunto the light of nature cannot aſpire: yet notwithſtanding, that men are ſaid to have, even from the *Light and Law of Nature*, ſome notions and conceits of *virtue, vice, juſtice, injury, good and evil*, is moſt true and certain. Yet we muſt underſtand that this *light of Nature* is uſed in two ſeveral ſenſes; *firſt*, as it ſprings from ſenſe, Induction, Reaſon, Arguments, according to the *Laws of Heaven and Earth*; *Secondly*, as it is imprinted and ſhines upon the ſpirit of Man by an inward inſtinct according to the *Law of Conſcience*, which is a ſpark, and, as it were, the Remains of a Priſtine and Primitive Purity: in which latter ſenſe principally, the ſoul is participant of ſome light to behold and diſcern the perfection of the *Moral Law*; which light is not altogether ſo clear, but ſuch as in ſome meaſure rather reprehends *vices*, than fully informes us concerning Duties: So then the *Religion* as well *Moral* as *Myſtical* depends upon *Divine Revelation.*

§ The *uſe, notwithſtanding, of Humane Reaſon in matters ſpiritual*, is without queſtion, manifold, very ſpacious, and general; and it is not for nothing that the Apoſtle calls Religion, *our reaſonable ſervice of God*. Let it be remembred that the ſhadows and Figures of the old Law, *were full of Reaſon* and *ſignification*, much differing from the ceremonies of Idolatry and magick, which were ſurd and mute; oftentimes inſtructing nothing, no not ſo much as inſinuating any thing. *The Chriſtian Faith eſpecially, as in all things, ſo in this is eminent, and deſerves highly to be magnified, that it holds a golden Mediocrity touching the uſe of Reaſon and Diſputation, which is the off-ſpring of Reaſon; between the Law of the Heathen and the Law of Mahomet, which have imbraced the two extremes*; for the Religion of the *Heathen*, had no conſtant belief or confeſſion; on the contrary in the Religion of *Mahomet*, all Diſputation was interdicted: ſo as one hath the very face of wandring and multifarious error; the other of cunning and cautelous impoſture; whereas the *Holy Chriſtian Faith* doth both admit and reject *Diſputation*, but according to due bounds. V. Doctiſſ. Hookerum de LL. Eccl. Politiæ l. 3. §. VIII, IX. l. 1. § VIII IX. Rom. XII,

§ The *uſe of humane Reaſon in matter pertaining to Religion* is of two ſorts; the one in the *explication and conception of the Myſtery*; the other in *Illations and Inferences derived from thence*. As touching the *Explication of Miſteries*, we ſee that God vouchſafeth to deſcend to the weakneſs of our capacity, ſo expreſſing and unfolding his *Miſteries* as they may be beſt comprehended by us; *and inoculating*

ting, as it were, his Revelations, upon the Conceptions and Notions of our Reason; and so applying his inspirations to open our understanding, as the form of the key is fitted to the ward of the lock. In which respect notwithstanding, we ought not to be wanting to our selves; for seeing God himself makes use of the faculty and function of *Reason* in his *Illuminations*; we ought also every way to imploy and improve the same, whereby we may become more capable to receive and draw in such holy *Mysteries*: with this caution, that the mind for its Module be dilated to the amplitude of the Mysteries; and not the Mysteries be streightned and girt into the narrow compass of the Mind.

§ *As for Illations*, we ought to know that there is allowed us a *use of Reason* and Argument, in regard of *Mysteries*, Secondary and Respective; not Primitive and Absolute: for after the *Articles and Principles of Religion* are placed in their seats, so as they stand altogether exempt from the examination of *Reason*, it is then indeed permitted unto us to make derivations and inferences from them, according to the Analogy of them. *In things Natural* this holds not; for both the Principles are liable to examination, by *Induction* I mean, though not by *Syllogism*; and the same Principles have no repugnancy with *Reason*, but that the first and middle Propositions may be derived from the same Fountain. But it is otherwise in the *Doctrine* of *Religion*, where the first propositions are their own supporters and subsistent by themselves; and again, they are not regulate by that *Reason*, which inferreth consequent propositions. Nor holdeth this in *Religion* alone, but also in other *Sciences*, both of greater and smaller nature; namely *where the Primarie Propositions are Placita not Posita*; because in *these* also the *use of Reason* cannot be absolute. *For instance we see in Games, as Chess, or the like, that the first Draughts and Laws of the Play are merely positive & ad placitum, which must absolutely be accepted, and not disputed; but that thereupon you may win the Game, and with the best advantage manage your Play, is a thing artificial and rational.* So it is likewise in Humane Laws, wherein there be many *Maximes* (as they stile them) that is, mere *Placita Juris*, grounded more *upon Authority than Reason*; neither come they into disceptation: but what is *most just*, not absolutely but relatively, (that is from the Analogie of *these Maximes*) that indeed is *Rational*, and affords a large field of Disputation. Such therefore is that *secondary Reason*, which hath place in *sacred Theology*, that is, which is grounded upon the *Placits of God.*

§ And as there is a double *use of humane Reason in matters Divine*; so in the same use there is a double excess; the one *where there is made a more curious enquiry into the manner of the Mystery, than is beseeming*; the other *when equal Authority is attributed to Derivations, which is to Principles.* For both he may seem to be *Nicodemus Disciple*, who pertinaciously enquires, *How can a man be born when he is old?* and he in no wise can be accounted *Pauls Disciple*, which may not sometimes interlace his instructions with *Ego non Dominus*, or that, *According to my Judgment*; for to many *Illations* that stile is well applied: wherefore to my understanding it would be a wholesome and very pro-

Joan. III.

1 Cor. VII.

profitable course, if there were a sober and diligent Tractate compiled, which as a kind of *Divine Dialectick* might give directions, *concerning the true limits and use of Reason in matters Divine*; which would be a kind of *Opiate Medicine, not only to quiet and lay asleep the vanity of Aery speculations, wherewith the Schools sometime labour; but likewise not a little calm, and mitigate the furies and rage of Controversies, which raise sidings and factions in the Church.* A Treatise of this nature we set down as *Deficient*, and term it *Sophron* or *the the right use of Humane Reason in matters Divine.*

II. It imports exceedingly the *Peace of the Church*, that the *League of Christians*, prescribed by our Saviour in those two clauses which seem to cross one the other, were well and clearly expounded; whereof the one defines thus, *He that is not with us is against us*: the other thus: *He that is not against us is with us.* From those two several assertions it plainly appears, *that there are some Articles wherein whosoever dissenteth, is to be held as not comprehended in the league: and there are other Articles, wherein a man may dissent, and yet the league be kept entire.* For the bounds of Christian community are set down; *One Faith, one Baptism*; and not, *one Rite, one Opinion.* We see likewise the Coat of our Saviour *was entire without seam*; but the garment of the Church *was of divers Colours.* The *Chaff* must be sever'd from the corn in the ear; but the *Tares* may not presently be pull'd up from the Corn in the Field. When *Moses* saw an Egyptian fighting with an Israelite, he did not say, why strive you? but drew his sword and slew the Egyptian; but when he saw two Israelites fight, though it could not possible be that both parties had a just cause; yet he thus bespeaks them both, *You are brethren, why strive you?* Wherefore if these things be well observed, it will be found a matter of great moment and use to define what, and of what latitude those points are, which discorporate men from the body of the Church, and cast them out and quite cashier them from the communion and fellowship of the faithful. And if any think that this hath been done now long ago, let him seriously consider with what sincerity, and moderation the same hath been perform'd. In the mean space it is very likely, that he that makes mention of *Peace*, shall bear away that answer *Jehu* gave to the Messenger, *Is it* Peace *Jehu? What hast thou to do with* Peace? *turn and follow me. Peace* is not the matter that many seek after, but parties and siding: Notwithstanding we thought good to set down amongst *Deficients*, as a wholsome and profitable work, a Treatise touching *the Degrees of Unity in the City of God.*

* IRENÆUS, sive de Gradibus unitatis in Civitate Dei. Luc. c. IX. Luc. XI. Ephes. IV. Joan. XX. Psal. XIV. Exod. II. 1 Reg. IX.

III. Seeing the Parts of Sacred Scripture touching the *Information of Theology*, are such and so great; let us specially consider the Interpretion thereof; nor do we here speak of the *Authority* of *interpreting them*, which is establisht by the consent of the Church, but of the *manner of Interpreting.* This is of two sorts, *Methodical*; and *Solute*, or at large: for this divine water, which infinitely excels that of *Jacobs well*, is drawn forth and deliver'd much after the same manner as *Natural waters* use to be out of *Wells*; for these at the first draught are either receiv'd into *Cisterns*, and so may be conveyed, and

* UTRES COELESTES, sive Emanationes Scripturarum.

and deriv'd by many Pipes for publick and private uſe; or is pour-ed forth immeditately in Buckets and Veſſels, to be us'd out of hand, as occaſion requires.

§ Now this former *Methodical manner* hath at length brought forth unto us *Scholaſtical Theology*, whereby *Divinity* hath been collected into an *Art*, as into a *Ciſtern*; and the ſtreams of *Axioms* and *Poſitions*, diſtributed from thence into all parts.

§ But in *ſolute Manner of Interpreting*, *two extreams* intervene; the one *preſuppoſeth ſuch a perfection in Scriptures, as that all Philoſophy ought to be fetcht and deriv'd from thoſe ſacred Fountains; as if all other Philoſophy were an unhallowed and Heatheniſh thing.* This diſtemperature hath prevail'd eſpecially in the School of *Paracelſus*, and ſome others; the ſource and ſpring whereof flowed from the Rabbins and Cabaliſts. But theſe men have not attain'd their purpoſe; nor do they give honour (as they pretend) to *Scriptures*, but rather embaſe and diſtain them. For to ſeek a *materiate Heaven* and Earth in the Word of God, whereof it is ſaid *Heaven and Earth ſhall paſs, but my word ſhall not paſs*, is indeed to purſue Temporary things amongſt eternal: *for as to ſeek Divinity in Philoſophy, is as if you would ſeek the living amongſt the Dead*; ſo on the other ſide, *to ſeek Philoſophy in Divinity, is all one as to ſeek the dead amongſt the living.*

Mat. xxiv.

§ The other *manner of Interpreting*, which we ſet down as an exceſs, ſeems at firſt ſight ſober and chaſte; yet notwithſtanding it both diſhonoureth *Scriptures*, and is [illegible] great prejudice and detriment to the Church; and it is, to ſpeak in a word, when *Divinely-inſpir'd Scriptures are expounded after the ſame manner that humane writings are.* For it muſt be remembred, that there are two points known to God the Author of Scripture, which man's nature cannot comprehend; that is, *The ſecrets of the Heart*; *and the ſucceſſion of Times.* Wherefore ſeeing the Precepts and Dictates of Scriptures were written and *directed to the Heart and Thoughts of men*, and comprehend the viciſſitudes of all Ages, with an eternal and certain fore-ſight of all Hereſies, *Contradictions*; differing and mutable eſtates of the Church, as well in general, as of the Elect in ſpecial; they are to be interpreted according to the Latitude and the proper ſence of the place, and reſpectively toward that preſent occaſion whereupon the words were utter'd; or in preciſe congruity from the Context of the precedent and ſubſequent words; or in contemplation of the principal ſcope of the place; but ſo as we conceive them to comprehend, not only totally or collectively, but diſtributively, even in clauſes, and in every word, infinite ſprings and ſtreams of Doctrine to water every part of the Church, and the ſpirits of the Faithful. For it hath been excellently obſerved, that the Anſwers of *our Saviour*, to many of the queſtions which were propounded to him, ſeem not to the purpoſe, but, as it were, impertinent to the ſtate of the queſtion demanded. The Reaſons hereof are two: the one, that being he knew the *thoughts* of thoſe that propounded the Queſtions, not from their words, as we men uſe to do, but immediately, and of himſelf, he made anſwer to their *thoughts*,

not

not to their *words*. The other Reaſon is, that he ſpake not only to them that were then preſent, but to us alſo who now live, and to men of every Age and Place to whom the Goſpel ſhould be preacht: which ſenſe in many places of Scripture muſt take place.

§ Theſe thus briefly toucht and fore-taſted, come we now to that Treatiſe which we report as *Deficient*. There are found indeed amongſt *Theological writings* too many *Books of Controverſies*, an infinite Maſs of that *Divinity* which we call *Poſitive*, as *Common-places*; *Particular Treatiſe*; *Caſes of Conſcience*; *Sermons*; *Homilies*; and many *Prolix Commentaries* upon the *Books of Scripture*: but the Form of writing *Deficient* is this, namely *ſuccinct and ſound Collection, and that with judgement, of Annotations and Obſervations upon particular Texts of Scripture*; *not dilating into common-places*; *or chaſing after Controverſies*; *or reducing them into method of Art: but which be altogether ſcattered and Natural*; a thing indeed now and then expreſt in more learned Sermons, which for moſt part vaniſh; but which as yet, is not collected into Books that ſhould be tranſmitted to Poſterity. *Certainly* as Wines which at firſt preſſing run gently, yield a more pleaſant taſte, than thoſe where the Wine-preſs is hard wrought; becauſe thoſe ſomewhat reliſh of the ſtone and skin of the Grape; ſo thoſe obſervations are moſt wholſome and ſweet, which flow from Scriptures gently expreſt, and naturally expounded, and are wreſted or drawn aſide to common places or Controverſies; ſuch a Treatiſe we will name, *The Emanations of Scripture.*

" § Thus have we made, as it were, a *ſmall Globe of the Intellectu-*
" *al world*, as faithfully as we could, together with a deſignation
" and deſcription of thoſe parts which I find not conſtantly occu-
" pate, or not well converted by the Induſtry and Labours of men.
" In which work if I have any where receded from the opini-
" on of the Ancients, I deſire that Poſterity would ſo judge of my
" intentions, as that this was done with a mind of further *Progreſſion*,
" and *Proficience in melius*; and not out of a humour of *Innovation*,
" or Tranſmigration *in aliud*: for I could not be true and conſtant
" to my ſelf, or the Argument which I have in hand, if I had not re-
" ſolvedly determin'd, *To add to the Inventions of others*, ſo far as I
" was able. And I am as willing, and as ſincerely wiſh, that later
" ages may go beyond me hereafter, as I have endeavoured to go
" beyond others now. And how faithfully I have dealt in this bu-
" ſineſs may appear even by this, that I have propounded my opini-
" ons every where naked and unarm'd, not ſeeking to prejudicate
" the liberty of others by the pugnacity of confutations. For in a-
" ny thing which I have well ſet down, I am in good hope that it
" will come ſo to paſs, that if in the firſt reading a ſcruple or objecti-
" on be mov'd, in the ſecond reading an anſwer will be ready made;
" and in thoſe things wherein I have chanc'd to err, I am ſure I have
" not prejudiced the right by litigious arguments, which common-
" ly are of this nature, *that they procure Authority to error, and dero-*
" *gate from Good inventions*; *for from Dubitation Error acquires Ho-*

"*nour, Truth ſuffer repulſe.* And now I call to mind an Anſwer *Themi-*
"*ſtocles* made, who, when an Ambaſſador in a ſet ſpeech had boaſted
"great matters of a ſmall Village, takes him up thus, *Friend, your*
"*words would require a City.* Surely I ſuppoſe it may be juſtly ob-
"jected to me, that *my words require an Age*, a whole Age perchance
"to prove them, and many Ages to perfect them. Notwithſtanding
"ſeeing the greateſt matters are owing unto their Principles, it is
"enough to me that I have *Sowen unto Poſterity, and the immortal*
"*God*, whoſe divine Majeſty I humbly implore through his Son and
"our Saviour, that he would vouchſafe graciouſly to accept theſe
"and ſuch *like ſacrifices of Humane underſtanding ſeaſoned with Reli-*
"*gion as with ſalt, and incenſed to his Glory.*

A NEW WORLD OF SCIENCES: OR THE DEFICIENTS

LIB. II.

* *Errores Naturæ* : Or the Hiſtory of Preter-Generations, *Cap.*2. *Sect.*3.

* *Vincula Naturæ*, Experimental or Mechanical Hiſtory, *Cap.*2. *Sect.*4.

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* *Oculus Polyphemi*, Or the Hiſtory of Learning from age to age, *Cap.*4. *Sect.*1.

* *Hiſtoria ad Prophetias*, The Hiſtory of Propheſie, *Cap.* 11. *Sect.*2.

* *Sapientia Veterum*, Philoſophy according to ancient parables, *Cap.*13. *Sect.*3

LIB. III.

* *Philoſophia Prima*, Or the Common and General Axioms of Sciences, *Cap.* 1. *Sect.*3.

* *Aſtronomia Viva*, Living Aſtronomy, *Cap.*4. *Sect.*3. § 1.

* *Aſtrologia Sana*, Sound Aſtrologie, *Cap.*4. *Sect.*3. § 2.

* *Problemes* Natural, a continuation thereof, *Cap.*4. *Sect.*5.

* *Placites* of ancient Philoſophers, *Cap.*4. *Sect.*5. § 1.

* *Formæ Rerum* : A part of Metaphyſick, of the Forms of things, *Cap.*4. *Sect.*6.

* *Magia Naturalis* : Or the ſetting of *Formes* on work, *Cap.* 5. *Sect.*1. § 1.

* *Inventarium Opum Humanarum*, An Inventary of the Eſtate of Man, *Cap.*5. *Sect.*2.

* *Catalogus Polychreſtorum*, a Catalogue of Things of multifarious Uſe and Application, *Cap.*5. *Sect.*2. § 1.

LIB. IV.

* *Triumphi Hominis*, or of the *Summities* and higheſt pitch of Humane Nature, *Cap.*1. *Sect.*2. § 2.

* *Phyſiognomia Corporis in Motu*, a Phyſical diſcovery of the Body upon Motion, *Cap.*1. *Sect.*3. § 1.

* *Narrationes Medicinales*, *Medicinal Reports*, or Hiſtorical obſervations in Phyſick, *Cap.* 2. *Sect.*3. § 1.

* *Anatomia Comparata*, Comparative Anatomy, *Cap.*2. *Sect.*3. § 2.

* *Morbi Inſanabiles*, Of the curing of Diſeaſes counted incurable, *Cap.*2. *Sect.*2. § 5.

* *De Euthanaſia exteriore*, Of a fair and eaſie outward paſſage out of life, *Cap.*2. *Sect.*3. § 6.

* *Of Authentick* and approved Medicines, *Cap.*2. *Sect.*3. § 7.

* *Artificial* Imitation of Natural Baths, *Cap.*2. *Sect.*3. § 8.

* *Filum Medicinale*, An orderly courſe and ſequel in Phyſick, *Cap.*2. *Sect.*3. § 9.

* *Prolongation* of the ſpace or courſe of life, *Cap.*2. *Sect.*4.

* Of the ſubſtance of the *Senſible*, or meerly producted *Soul*, *Cap.*3. *Sect.*1.

* Of the impulſion of the *Spirit* in voluntary Motion, *Cap.* 3. *Sect.*1.

* Of the Difference between Perception and Sence, *Cap.* 3. *Sect.*3. § 3.

* *Radix Perſpectivæ*, *The original of the Perſpectives*, or of the *Form* of light, *Cap.*3. *Sect.*3. § 4.

LIB. V.

* *Venatio Panis*, Or Literate experience, *Cap.*2. *Sect.*1. § 1,2.

* *Organum Novum*, Or true Directions for the Interpretation of Nature, *Cap.*2. *Sect.*3. § *vult.*

* *Topicæ Particulares*, *Or Places of Invention*, appropriate to Particular Subjects and Sciences, *Cap.* 3. *Sect.*2. § 1.

* *Elenchus Idolorum*, *Sophiſm-Images*, impoſed upon the underſtanding from the nature of Man, General, Particular, or Communicative, *Cap.*4. *Sect.*3.

* *Analogy of Demonſtrations* according to the nature of the Subject, *Cap.*4. *Sect.*4.

LIB. VI.

* *Notes or Impreſſions of Things*, from Congruity, or from *ad Placitum*, *Cap.*1. *Sect.*1. § 2.

* *A Philoſophical Grammar*, Or the Analogy between Words and Things, *Cap.*1. *Sect.*2. § 1.

* *Traditio Lampadis*, Or the *Method* deliver'd unto the Sons of Wiſdom, *Cap.*2. *Sect.*1. § 1.

* *Of the Wiſdom of private Speech*

Speech; Or reſpective Deliveries of a man's ſelf, *Cap.*3. *Sect.*1. § 1.

* *The Colours* of *Good* and *Evil* in appearance ſimple and compar'd, *Cap.*3. *Sect.*2. § 1.

* *Antitheta Rerum*, the Contre-poſition of things; *Cap.* 3. *Sect.*3.

* *Formulæ Minores*, leſſer forms or ſtiles of Speech, *Cap.* 3. *Sect.*4.

LIB. VII.

* *Satyra Seria*, or of ſubtil Reaches, Cautels, and Impoſtures in Profeſſions, *Cap.*2. *Sect.*3. § 3.

* *Georgica Animi*, the culture of the mind, *Cap.*3. *Sect.*1.

LIB. VIII.

* *Amanuenſis Vitæ*, or of *Sparſed Occaſions*, *Cap.*2. *Sect.*1. § 1.

* *Faber Fortunæ*, the *Contriver* of *Fortune*; or the courſe of life for advancement, *Cap.*2. *Sect* 1.

* *Conſul Paludatus*; Or the the Art of enlarging the bounds of a Kingdom or State, *Cap.* 3. *Sect* 1.

* *Idea Juſtitiæ Univerſalis*; Or the Fountains of Law, *Cap.* 3. *Sect.*2.

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* *Irenæus*, Or of the degrees of Unity in the City of God, *Cap.*1. *Sect.*1.

* *Utres Cœleſtes*; Or the Emanations of SS. Scriptures, *Cap.* 1. *Sect.*3.

THE

INDEX

OF

SACRED SCRIPTURES

Illuſtrated or Alleged.

GEN.

Cap.	Verſ.	Pag.
1	1,&c.	26
1	2	137
1	3	27
1	9,&c.	102
1	9	132
1	27	87
2	7	102
2	7	132
2	8	27
3	5	239
3	19	135
3	19	167
3	22	71
4	2	27
4	21	27
5	24	223
11	9	27
18	10	316
45	3	73
49	9	287

EXOD.

2	13	319
7	1	180
7	12	48
24	18	223

LEVIT.

13	12, 13	28

DEUT.

Cap.	Verſ.	Pag.
12	16	117

I. REG.

20	34	46

III. REG.

4	29	2
4	29	247
4	33	28
4	33	247

IV. REG.

9	30	130
9	18	319

ESTH.

6	1	63

JOB

9	9	28
10	10	28
13	9	5
26	7	28
26	13	28

Cap.	Verſ.	Pag.
28	1, &c.	28
38	31	28
	PSAL.	
7	4	283
8	3	87
19	1,&c.	30
19	1	74
19	1	316
45	13	319
62	10	234
90	4	65
116	15	223
123	2	232
145	9	240
	PROV.	
4	12	104
4	23	219
6	6	166
6	11	250
9	7	250
9	9	265
10	1	251
10	7	62
10	7	251
11	29	252
12	10	255
14	6	230
14	23	262
15	1	248
15	15	224
15	19	260
17	2	248
17	9	262
18	2	230
18	17	257
20	5	270
20	14	186
20	27	4
22	13	49
22	24	262
22	29	258
23	23	12

Cap.	Verſ.	Pag.
25	1	25
25	3	14
25	3	272
25	26	262
27	5	264
27	6	25
27	12	264
27	14	266
27	19	ib.
28	3	261
28	20	12
28	21	261
29	8	253
29	9	249
29	11	256
29	12	254
29	21	258
	ECCLES.	
1	8	4
1	10	39
1	18	3
2	15	120
3	11	4
3	11	103
3	14	84
4	15	359
7	8	252
7	16	265
7	21	359
9	14	260
10	1	253
10	4	256
10	10	44
11	4	246
12	11	35
12	12	3
	ISAIAS.	
14	14	239
	JEREM.	
6	6	22

Cap.	Verſ.	Pag.
	EZECH.	
29	3	268
	DAN.	
12	4	65
	JOEL.	
2	28	120
	HABAC.	
1	16	192
1	16	268
2	2	66
	MATTH.	
5	44	240
5	44	316
6	27	291
6	33	284
7	6	250
9	11	186
11	19	41
13	52	152
22	29	30
24	35	320
25	20	14
	LUK.	
2	46	29
9	50	319
10	41	194
11	23	319
	JOAN.	
3	4	318
5	43	90
19	23	319
	ACT.	
2	2	29
7	22	27
20	35	225
	ROM.	
9	3	222
12	1	317
	I COR.	
2	14	66
7	12	318
8	1	3
8	1	4
13	12	316
	II COR.	
2	11	88
	EPHES.	
2	12	66
4	5	319
	COLOS.	
2	8	3
2	18	88
3	14	239
	I TIM.	
6	5	18
	TIT.	
1	12, 13	234
	JAC.	
1	17	48
1	24	273
	APOC.	
2	24	39
4	8	103
14	13	225

THE

INDEX

OF

HUMANE AUTHORS

Cenſured, Praiſed, Cited.

A.

Æ Sop. Fab. p. 19, 45, 147, 188, 194, ib.
Agel. N. A. 161, 190.
Agrippa, p. 98.
Alcoran. Azorara. 5. p. 317.
Alhazen. p. 85.
Ariſtoteles, p. 20, 22, 24, 52, 53, 71, 84, 85, 100, 101, 104, 105, 109, 114, 115, 118, 119, 127, 140, 152, 157, 159, 160, 162, 166, 190, 220, 221, 232, 236, ib. 237, 239.

B.

Bacon. p. 34, 78, 159, 160, 287.
Boëtius, p. 85.

C.

Campanella. p. 136.
J. Capitol. p. 57.
Cardan. p. 137. 282.
Celſus Med. p. 124, 142.
Cicero. p. 13, 24, 35, 45, 48, 49, 66, 70, 72, 104, 115, 142, 144, 152, 153, 160, 168, 182, 186, 192, 229, 230, 232, 237, 244, 245, 247, ib. 252, 268, 270, 273, 278, ib. 282, 288, 290.
Claud. p. 70.
De Commines, p. 255.
Gollius, p. 135.

D.

Demoſt. p. 130, 153, 189, 190, 220, 271, 279, 280.
P. Diaconus, p. 29.
Dion. p. 30, 32, 180, 384.
Dion. Areop. p. 26.
Donius, p. 133.

E.

Epict. p. 38, 189, 224, 273, 281.
Epiphan. p. 160.
Euclid. p. 84, 158.
Eurip. p. 41. 80.

F.

Florus, p. 231.
Flud. p. 119.

G.

Gilbert.p.73,155

H.

Herodian. p.30,123.
Herodat. p.76,167.
Heſiod. p.190.
Hipp. p.85,150,232.
Hiſt. Ger. p.115.
Hiſt. Hen. *7th.* p.285.
Homer. p.6,69,72,88,114,119.
Hooker. p.317.
Horat. p. 20, 142, 178, 186, 191, 271,283.

I.

Jac. R. p.47,53,61,116, 229, ib.
Iambl. p.223.
P. Jud. p.5.
Jul. p.29.
Juven. p.228,237,270.

L.

Laërt. p.12,15,20, 53, 70, 71, 75, 88,223,245.
Livius, p.12,22,68,165,231, 289.
Lucan. p.90.
Lucian. p.15.
Lucret. p.40.
Lullius, p.180.

M.

Mach. diſcorſe ſopra Liv. lib. 1. cap.10.
Machiav. p.11,85, 258, 260, 267, 279,280,282,286.
Mart. Ep. p.74,169.
Meteran. p.115.
Mori vit. p.116.
Mount. p.273.

N.

Nonn. p.80.

O.

Orpheus, p.80.
Ovid. p. 25, 37,41,70,76, 78, 80, 121,140,142,182,267,276.

P.

Pancirol. p.142,148.
Paracel. p.84,89,119,135, 160.
Pauſan. p.77.
Perſ. p.143.
Philoſt. p.31,115.
Pind. p.179, 234,244.
Platin. p.8.
Plato. p.2,7,15,28, 31, 38, 53,71, 102, 104, 114, 115, 118, 142, 153, 158, 159, 168, 181, 182, 193,227,269.
Plaut. p.234,268.
Plin. ſen.32,52,143.
Plin. jun. p.61,230,239.
Plut. p.10, 13,15, 33, 34, 35, 36, 38, 63, 77, 184, 193, 231, 243, 244, 250, 259, 268. ib. 277. ib. 282, 285,286. ib. 317.

Q.

Quint. p.19,115.

R.

Ramus, p.179.
Renovard.p.77,80.

S.

Saluſt. p.12,13,134,224, 268,278.
Sands. p.75,77,78.

Selden. p.290.
Senec. p.9,14,22,38,72, 114,140, 158, 195, 220, 221, 225, 226, 232.
Socrat. p.53.
Spart. p. 16.
Strab. p.77.
Sueton. p.32,35,36,63, 101, 115, 125,167,193, 268,269,278.

T.

Tacit. p.2,12,20,41,90,101, 115, 216,255,259-265, ib. 270, ib. 271, ib. 272, 274,275,278, ib.
Teleſ. p.133.

V.

A Vict. p.32.
Virg. p.7,19,38,39,45,46, 49, 61, 64,74,85,87,91,103, 105, 110, 119,120,136,142, ib. 185,189, 221, 226, 240, 268, 270, 283, 286,287.

Z

Zenophon. p.36,115,239.

Dectori

LECTORI ACADEMICO S.

CErte Philoſophia Naturalis *omnium Scientiarum nobiliſſima eſt, Certiſſima ac amplisſima; utpote ſuo ambitu Complectens volumen illud magnum & admirandum* Operum Dei ac Creaturarum; *eorumq; varietatem, Conſtantiam ac ornatum.* Catalogus vero iſte, *qui Capita & ſumma Rerum Continet, omnium qui unquam prodiere, perfectiſſimus eſt, maxime ordinatus ac definitus: ad* imaginem Mundi *compoſitus ac* Rerum; *non* intellectus & ſpeculationum, *quarum non eſt ordo, numerus, neq; finis.* Catalogus *reverà ad menſuram univerſi & experimentorum ita accommodatus,* ut naturam in natura quærat, *eamq; in omnes ejus formas mutatam conſtringat, omneſq; ejus ſtatus comprehendat*; libertatem, errores, vincula; in ſpeciebus ſuis, in monſtris, in mechanicis. *Deniq;* Index *eſt incomparabilis, ac ſummo judicio elaboratus. Ad ſylvam & ſupellectilem Hiſtoriarum Naturalium Colligendam, nullus uberior; ad, ſic collectam, in locos Com. & proprias claſſes digerendam, nullus Concinnior; ad, ſic digeſtam, memoriter retinendam, nullus efficacior unquam extitit; vel humano ingenio ac induſtria excogitari poteſt.* Interpres *ſic cogitavit? quod* Juventuti Academicæ ac veritatis amantibus *notum fieri, ipſorum intereſſe putavit. Erunt fortaſſis Pedarii Senatores, qui, modernis methodis adſueti, aliam ſententiam ferent; atque ferant aliam*; Sed juſtificata eſt ſapientia à filiis ſuis.

CAT.

CATALOGUS

Hiſtoriarum Particularum.

Secundum Capita.

1 Hiſtoria Cœleſtium; ſive Aſtronomica.
2 Hiſtoria configurationis Cœli & partium ejus, versùs Terram & partes ejus; ſive Coſmographica.
3 Hiſtoria Cometarum.
4 Hiſtoria Meteororum ignitorum.
5 Hiſtoria Fulgurum, Fluminum, Tonitruum, & Coruſcationum.
6 Hiſtoria Ventorum, & Flatuum repentinorum, & Undulationum Aeris.
7 Hiſtoria Iridum.
8 Hiſtoria Nubium, prout ſupernè conſpiciuntur.
9 Hiſtoria Expanſionis Cœruleæ, Crepuſculi, plurium Solium, plurium Lunarum, Halonum, Colorum variorum Solis & Lunæ; atq; omnis varietatis Cœleſtium ad aſpectum, quæ fit ratione Medii.
10 Hiſtoria Pluviarum Ordinariarum, Procelloſarum, & Prodigioſarum; etiam Cataractarum (quas vocant) Cœli, & ſimilium.
11 Hiſtoria Grandinis, Nivis, Gelu, Pruinæ, Nebulæ, Roris, & ſimilium.
12 Hiſtoria omnium aliorum Cadentium ſive Deſcendentium ex alto, & ſupernè generatorum.
13 Hiſtoria Sonituum in alto (ſi modò ſint aliqui) præter Tonitrua.
14 Hiſtoria Aeris, in Toto, ſive in Configuratione Mundi.
15 Hiſtoria Tempeſtatum, ſive Temperamentorum Anni, tam ſecundùm variationes Regionum, quàm ſecundùm accidentia Temporum, & periodos Annorum; Diluviorum, Fervorum, Siccitatum, & ſimilium.
16 Hiſtoria Terræ & Maris; Figuræ & Ambitûs ipſorum, & Configurationis ipſorum inter ſe, atq; Exporrectionis ipſorum in latum

aut

aut anguſtum ; Inſularum Terræ in Mari, Sinuum Maris, & Lacuum ſalſorum in Terrâ, Iſthmorum, Promontoriorum.

17 Hiſtoria Motuum (ſi qui ſint) globi Terræ & Maris ; & ex quibus Experimentis illi colligi poſſint.

18 Hiſtoria Motuum majorum & Perturbationum in Terrâ & Mari, nempè Terræ Motuum & Tremorum & Hiatuum, Inſularum de novo enaſcentium, Inſularum fluctuantium, Abruptionum Terrarum per ingreſſum Maris, Invaſionum & Illuvionum, & contrà Deſertionum Maris ; Eruptionum ignium è terrâ, Eruptionum ſubitanearum Aquarum è Terrâ, & ſimilium.

19 Hiſtoria Geographica Naturalis, Montium, Vallium, Sylvarum, Planitierum, Arenarum, Paludum, Lacuum, Fluviorum, Torrentium, Fontium, & omnis diverſitatis ſcaturiginis ipſorum, & ſimilium : miſſis Gentibus, Provinciis, Urbibus, & hujuſmodi Civilibus.

20 Hiſtoria Fluxuum & Refluxuum Maris, Euriporum, Undulationum & Motuum Maris aliorum.

21 Hiſtoria cæterorum Accidentium Maris ; Salſuginis ejus, Colorum diverſorum, Profunditatis : & Rupium, Montium, Vallium ſubmarinarum, & ſimilium.

Sequuntur Hiſtoriæ Maſſarum majorum.

22 Hiſtoria Flammæ, & Ignitorum.

23 Hiſtoria Aeris, in ſubſtantiâ, non in Configuratione.

24 Hiſtoria Aquæ, in ſubſtantiâ, non in Configuratione.

25 Hiſtoria Terræ & diverſitatis ejus in Subſtantiâ, non in Configuratione.

Sequuntur Hiſtoriæ Specierum.

26 Hiſtoria Metallorum perfectorum, Auri, Argenti, & Minerarum, Venarum, Marcaſitarum eorundem : Operaria quoque in Mineris ipſorum.

27 Hiſtoria Argenti Vivi.

28 Hiſtoria Foſſilium ; veluti Vitrioli, & Sulphuris, *&c.*

29 Hiſtoria Gemmarum ; veluti Adamantis, Rubini, *&c.*

30 Hiſtoria Lapidum ; ut Marmoris, Lapidis Lydii, Silicis, *&c.*

31 Hiſtoria Magnetis.

32 Hiſtoria Corporum Miſcellaneorum, quæ nec ſunt Foſſilia prorſus, nec Vegetabilia ; ut Salium, Succini, Ambræ-griſeæ, *&c.*

33 Hiſtoria Chymica circà Metalla & Mineralia.

34 Hiſtoria Plantarum, Arborum, Fruticum, Herbarum : & Partium eorum, Radicum, Caulium, Ligni, Foliorum, Florum, Fructuum, Seminum, Lachrymarum, *&c.*

35 Hiſtoria Chymica circa Vegitabilia.

36 Hiſtoria Piſcium, & Partium ac Generationis ipſorum.

37 Hiſtoria Volatilium, & Partium ac Generationis ipſorum.

38 Hiſtoria

38 Hiſtoria Quadrupedum, & Partium ac Generationis ipſorum.

39 Hiſtoria Serpentum, Vermium, Muſcarum, & cæterorum Inſectorum; & partium ac generationis ipſorum.

40 Hiſtoria Chymica circa ea quæ ſumuntur ab Animalibus.

Sequuntur Hiſtoriæ Hominis.

41 Hiſtoria Figuræ, & Membrorum externorum Hominis, Staturæ, Compagis, Vultûs, Lineamentorum; eorumq; varietatis ſecundùm Gentes & Climata, aut alias minores Differentias.

42 Hiſtoria Phyſiognomica ſuper ipſa.

43 Hiſtoria Anatomica, ſive Membrorum internorum Hominis; & varietatis ipſorum, quatenùs invenitur in ipsâ naturali Compage & Structurâ, non tantùm quoad Morbos & Accidentia præternaturalia.

44 Hiſtoria partium ſimilarium Hominis; ut Carnis, Oſſium, Membranarum, *&c.*

45 Hiſtoria Humorum in Homine; Sanguinis, Bilis, Spermatis, *&c.*

46 Hiſtoria Excrementorum; Sputi, Urinarum, Sudorum, Sedimentorum, Capillorum, Pilorum, Reduviarum, Unguium, & ſimilium.

47 Hiſtoria Facultatum; Attractionis, Digeſtionis, Retentionis, Expulſionis, Sanguificationis, Aſſimilationis alimentorum in membra, Verſionis Sanguinis & Floris ejus in Spiritum, *&c.*

48 Hiſtoria Motuum Naturalium & Involuntariorum; ut Motûs Cordis, Motûs Pulſuum, Sternutationis, Motûs Pulmonum, Motûs Erectionis Virgæ, *&c.*

49 Hiſtoria Motuum mixtorum ex Naturalibus & voluntariis; veluti Reſpirationis, Tuſſis, Urinationis, Sedis, *&c.*

50 Hiſtoria Motuum Voluntariorum; ut Inſtrumentorum ad voces articulatas; ut Motuum Oculorum, Linguæ, Faucium, Manuum, Digitorum; Deglutionis, *&c.*

51 Hiſtoria Somni & Inſomniorum.

52 Hiſtoria diverſorum Habituum Corporis; Pinguis, Macilenti; Complexionum (quas vocant,) *&c.*

53 Hiſtoria Generationis Hominum.

54 Hiſtoria Conceptionis, Vivificationis, Geſtationis in utero, Partûs, *&c.*

55 Hiſtoria Alimentationis Hominis, atq; omnis Edulii & Potabilis, atq; omnis Diætæ; & Varietatis ipſorum, ſecnndùm Gentes aut minores differentias.

56 Hiſtoria Augmentationis & Incrementi Coporis in Toto & Partibus ipſius.

57 Hiſtoria Decurſûs Ætatis; Infantiæ, Pueritiæ, Juventutis, Senectutis, Longævitatis, Brevitatis Vitæ, & ſimilium, ſecundum Gentes & minores differentias.

58 Hiſtoria Vitæ & Mortis.
59 Hiſtoria Medicinalis, Morborum, & Symptomatum & Signorum eorundem.
60 Hiſtoria Medicinalis, Curæ, & Remediorum, & Liberationum à Morbis.
61 Hiſtoria Medicinalis eorum quæ conſervant Corpus & Sanitatem.
62 Hiſtoria Medicinalis eorum quæ pertinent ad Formam & Decus Corporis, *&c.*
63 Hiſtoria Medicinalis eorum quæ corpus alterant, & pertinent ad Regimen Alterativum.
64 Hiſtoria Pharmaco-polaris.
65 Hiſtoria Chirurgica.
66 Hiſtoria Chymica circa Medicinas.
67 Hiſtoria Visûs & viſibilium, ſive Optica.
68 Hiſtoria Picturæ, Sculptoria, Plaſtica, *&c.*
69 Hiſtoria Auditûs & Sonorum.
70 Hiſtoria Muſica.
71 Hiſtoria Olfactûs, & Odorum.
72 Hiſtoria Guſtûs & Saporum.
73 Hiſtoria Tactûs & ejus Objectorum.
74 Hiſtoria Veneris, ut ſpeciei Tactûs.
75 Hiſtoria Dolorum corporeorum, ut ſpeciei Tactûs.
76 Hiſtoria Voluptatis & Doloris in genere.
77 Hiſtoria Affectuum; ut Iræ, Amoris, Verecundiæ, *&c.*
78 Hiſtoria Facultatum Intellectualium; Cogitativæ, Phantaſiæ, Diſcursûs. Memoriæ, *&c.*
79 Hiſtoria Divinationum Naturalium.
80 Hiſtoria Dignotionum, ſive Diacriſium occultarum Naturalium.
81 Hiſtoria Coquinaria; & Artium ſubſervientium, veluti Macellaria, Aviaria, *&c.*
82 Hiſtoria Piſtoria, & Panificiorum; & Artium ſubſervientium, ut Molendinaria, *&c.*
83 Hiſtoria Vinaria.
84 Hiſtoria Cellaria, & diverſorum generum Potûs.
85 Hiſtoria Bellariorum & Confecturarum.
86 Hiſtoria Mellis.
87 Hiſtoria Sacchari.
88 Hiſtoria Lacticiniorum.
89 Hiſtoria Balneatoria, & Unguentaria.
90 Hiſtoria Miſcellanea circa curam corporis; Tonſorum, Odoratiorum, *&c.*
91 Hiſtoria Auri-fabrilis, & Artium ſubſervientium.
92 Hiſtoria Lanificiorum, & Artium ſubſervientium.
93 Hiſtoria Opificiorum è Serico & Bombyce, & Artium ſubſervientium.
94 Hiſtoria Opificiorum ex Lino, Cannabio, Goſſipio, Setis, & aliis Filaceis; & Artium ſubſervientium.
95 Hiſtoria Plumificiorum.
96 Hiſtoria Textoria, & Artium ſubſervientium.

97 Hiſtoria

97 Historia Tinctoria.
98 Historia Coriaria, Alutaria; & Artium subservientium.
99 Historia Culcitraria & Plumaria.
100 Historia Ferri-Fabrilis.
101 Historia Latomiæ sive Lapicidarum.
102 Historia Lateraria, & Tegularia.
103 Historia Figularis.
104 Historia Cæmentaria, & Crustaria.
105 Historia Ligni-fabrilis.
106 Historia Plumbaria.
107 Historia Vitri & omnium Vitreorum, & Vitriaria.
108 Historia Architecturæ in genere.
109 Historia Plaustraria Rhedaria, Lecticaria, *&c.*
110 Historia Typographica, Libraria, Scriptoria, Sigillatoria; Atramenti, Calami, Papyri, Membranæ, *&c.*
111 Historia Ceræ.
112 Historia Viminaria.
113 Historia Storearia, Opificiorum ex Stramine, Scirpis, & similibus.
114 Historia Lotricaria, Scoparia, *&c.*
115 Historia Agriculturæ, Pascuariæ, Cultûs Sylvarum, *&c.*
116 Historia Hortulana.
117 Historia Piscatoria.
118 Historia Venationis & Aucupii.
119 Historia Rei Bellicæ, & Artium subservientium; Armamentaria, Arcuaria, Sagittaria Sclopetaria, Tormentaria, Balistaria, Machinaria, *&c.*
120 Historia Rei Nauticæ, & Practicarum, & Artium subservitium.
121 Historia Athletica, & omnis generis Exercitationum Hominis.
122 Historia Rei Equestris.
123 Historia Ludorum omnis generis.
124 Historia Præstigiatorum & Circulatorum.
125 Historia Miscellanea diversarum Materiarum Artificialium; ut Esmaltæ, Porcellanæ, complurium Cæmentorum, *&c.*
126 Historia Salium.
127 Historia Miscellanea diversarum Machinarum, & Motuum.
128 Historia Miscellanea Experimentorum Vulgarium, quæ non coaluerunt in Artem.

Etiam Mathematicarum purarum Historiæ conscribendæ sunt, licèt sint potiùs Observationes quàm Experimenta.

129 Historia naturarum & potestatum Numerorum.
130 Historia naturarum & potestatum Figurarum.

Secundùm Capita.

NOn abs re fuerit admonere, quòd, cùm neceſſe ſit multa ex Experimentis ſub duobus Titulis vel pluribus cadere, (veluti Hiſtoria Plantarum *&* Hiſtoria Artis Hortulanæ *multa habebunt ferè communia) commordior ſit inquiſitio per Artes, Diſpoſitio verò per Corpora. Parùm enim nobis curæ eſt de Artibus ipſis Mechanicis, ſed tantùm de iis quæ afferunt ad inſtruendam Philoſophiam. Verùm hæc è re natâ melius regentur.*

FINIS.

Typographus Lectori.

UNâ aut alterâ Paginâ vacante in damnum Bibilopolæ, ad implendam areolam inanem, Nobiliſſ. Authoris Literas, ſuo Collegio miſſas ac propriâ manu munitas, ſubjungere viſum eſt. Quòd vivit Chartula hæc peritura, id noſtrum munus eſt; Tuum, Lector, ſi vigeat. Succincta pagina eſt, ſed ſolida: & excellentium virorum etiam Reliquiæ conſervandæ. *Vale.*

F R A. De *V E R U L A M I O*

Vice-Comes S^cti *A L B A N I.*

Percelebri Collegio Sanctæ & Individuæ Trinitatis.

IN

CANTABRIGIA. S.

RES omnes earumq; progreſſus initiis ſuis debentur : Itaq; cum initia Scientiarum è Fontibus veſtris hauſerim, incrementa ipſarum vobis rependenda exiſtimavi. Spero itidem fore, ut hæc noſtra apud vos tanquam in Solo nativo Feliciùs ſuccreſcant. Quamobrem & vos hortor, ut ſalvâ animi modeſtia, & erga veteres reverentiâ, ipſi quoq; Scientiarum Augmentis *non deſitis : verum ut poſt volumina ſacra verbi Dei & Scripturarum, ſecundo loco volumen illud magnum operum Dei & Creaturarum, ſtrenuè, & præ omnibus libris, qui pro Commentariis tantùm haberi debent, evolvatis.* Valete.

7/-

June 1915

Allen
10/1/55